Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

May 19, 1958

Methanol Special Report Page 3

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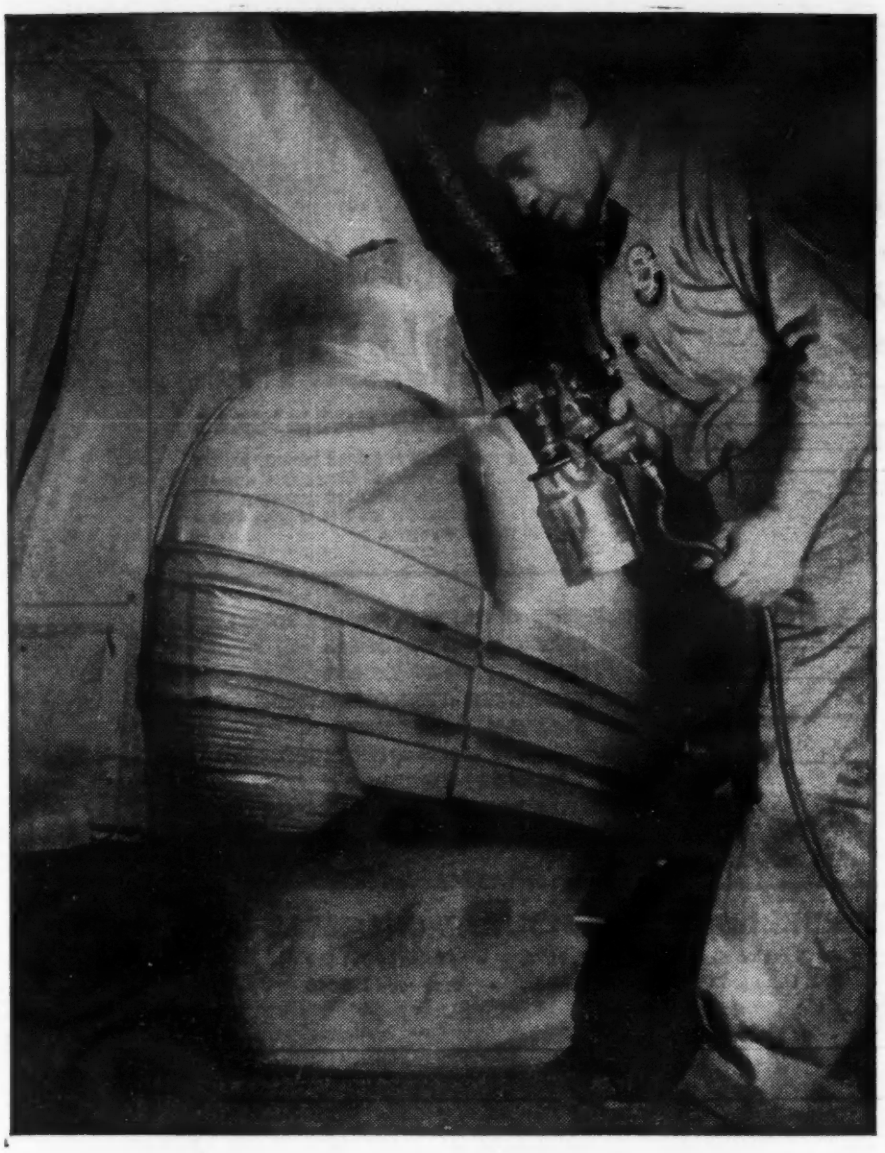

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Oil, Paint and Drug Reporter

Vol. 173 No. 21 30 Church St., New York 7, N. Y. May 19, 1958

METHANOL'S SHIFTING USES

Formaldehyde, Avgas Loom Larger

	1957	1953	1947
	(million gallons)		
Formaldehyde	75.0	66.0	36.0
Formaldehyde Inhibitor	6.0	5.0	2.3
Antifreeze	19.1	48.0	32.0
Solvents, Denaturants	10.0	10.0	6.7
Methacrylates	5.4	2.9	1.0
Aviation Gas	22.4	4.0	...
Exports	5.6	2.2	0.4
Miscellaneous	*70.1	*30.2	*5.6
Total	213.6	168.3	84.0

*Includes methanol used in manufacture of methyl chloride, methylamines and other chemicals and in inventories.

Methanol Makers Are Hoping Heavy Planes, Short Runways Will Bolster an Ailing Market

OPD Special Report

Buttonhole a methanol producer nowadays and, chances are, you'll run into a flurry of talk about short runways and heavy planes. The reason isn't hard to find: CH_3OH makers, worried about a sagging market, are looking more and more to aviation for a possible business lift. Many chemical men, in fact, can almost forget their troubles when they reflect on the enticing possibilities of anti-detonant injection fluid. For here, they believe, is a handy short-term remedy for ailing methanol sales. ADI fluid is a methanol-water mixture injected into aircraft engines during periods of peak load to obtain more power.

But, no matter how soothing it is for them to dwell on ADI fluid, methanol marketers still have much to brood about. For instance, the heavy increases in production capacity.

Then there's the possibility of an imminent price drop (admitted only privately, to be sure). Basis of this bit of depressing analysis is that formaldehyde, a key element in methanol's end-use pattern, has been drastically reduced in recent weeks.

Cancellation of Hercules Project

Another joyless thought is the cancellation of such projects as Hercules Powder Company's plant at Louisiana, Mo., which had been slated to produce methyl acrylate and methyl methacrylate.

Not the least important worry, however, is over-capacity. Ability of the industry to produce methanol is now rated at more than 313 million gallons a year. Tariff Commission figures show 1958 methanol output at less than 214 million gallons. Predictions are that production this year will be more than 100 million gallons below capacity.

A good indication of the foggy state of the market today is that there is no more announced expansion going on. Late in 1957, Hercules put a 7-million-gallon unit on stream at Louisiana, Mo.

Rohm & Haas Company, Philadelphia, started up a 100-ton-a-day installation at Houston, Tex., in early January. Last year Celanese Corporation of America, New York, upped its methanol capacity at Bishop, Tex., from 12 million gallons to 15 million gallons a year, and Commercial Solvents Corporation boosted its Sterlington, La., works to the 40-million-gallon class.

Most recent methanol facility to come on stream is Escambia Chemical Corpora-

—Continued on page 38

RCI SALES VICE-PRESIDENT: Ralph T. Urich, appointed vice-president and general sales manager of Reichhold Chemicals, Inc., White Plains, N. Y.

DuPont Wants to Keep GM Stock But Give Up the Right to Vote It

E. I. duPont de Nemours & Co. wants to keep its stock in General Motors Corporation but is willing to turn the voting rights over to duPont shareholders. Such a plan would mean that duPont could still make a profit on its motor stock but would have no voice in the management of GM. It was offered to the government last week by the Wilmington, Del., chemical giant as a counter-proposal aimed at settling the celebrated anti-trust case.

The offer was submitted to Judge Walter J. LaBuy in United States District Court in Chicago and with him it will probably rest for some time. The judge said it was unlikely hearings would be resumed before early September.

Alternative to Justice Proposal

The duPont plan is an alternative to a proposal by the Department of Justice that the chemical company distribute its motor holdings—amounting to 63 million shares—to its own stockholders over a ten-year period. Such a proposal was designed by the Justice department to satisfy a Supreme Court of the United States order that duPont divorce itself from GM.

DuPont said it was offering its plan to protect its stockholders from "staggering losses" that might result from sales and taxes imposed upon them under the government plan.

The company added that under the gov-

—Continued on page 60

TECHNICAL SERVICE MANAGER: F. Emerson Ivey, jr., who has been named manager of the newly-consolidated chemical technical service activities of Davidson Chemical Company, a division of W. R. Grace & Co., Baltimore, Md.

DuPont Stock Owners Protest Government Plan

Two investment companies, which were found innocent of violation of law in the E. I. duPont de Nemours & Co.-General Motors Corporation antitrust suit, told the United States District Court in Chicago last week that a decree proposed by the Department of Justice would virtually confiscate their entire interest in General Motors, currently valued at $667 million.

Christiana Securities Company and Delaware Realty & Investment Company, which together own 29 percent of the duPont outstanding common stock, said in a memorandum to the court:

"All of this would be strong medicine, indeed, even for a law violator; it makes

—Continued on page 60

Isobutylene Project Work For Petro-Tex Is Started

Petro-Tex Chemical Corporation, Houston, Tex., has started construction on a high-purity isobutylene plant. The product of the plant will be above 99 percent purity, and will be available in pressure-type tankcars in December. The capacity will be large enough to supply a substantial part of the present market for isobutylene, Petro-Tex said.

Great Lakes Carbon Unit Is Erected in Mexico City

Great Lakes Carbon Corporation's mining and mineral products division, located in Los Angeles, Calif., has opened the first Mexican "filteraid" plant in Mexico City.

The 6,000 ton per year unit is now producing a new type of "filteraid" made from perlite, a siliceous lava rock. Mexico was selected for the corporation's first foreign plant because of the easy access of raw material.

Insecticide Facility Completed by Allied

Allied Chemical Corporation has completed manufacturing facilities in Minneapolis, Minn., for the formulation of emulsifiable insecticides. Located at the plant of the General Chemical Division, the unit will make DDT, heptachlor, aldrin, dieldrin, endrin, toxaphene and other products.

The parent company, in New York, said the new high-capacity plant has been installed to serve the needs of General Chemical's customers in the upper midwest, particularly during large outbreaks of such insects as armyworms, grasshoppers, etc.

The plant will utilize new equipment specially designed by General Chemical's engineering department to increase the company's output of insecticides in the area.

The Minneapolis plant is the seventh General Chemical installation producing insecticides and basic toxicants.

Goodrich-Gulf to Build Rubber Plant in Texas

Goodrich-Gulf Chemicals, Inc., Cleveland, Ohio, will construct additional facilities at its Port Neches, Tex., plant for the manufacture of carbon black master batch rubbers. The facilities will cost in excess of $1 million and are designed to produce a new type of dry man-made rubber containing carbon black.

The manufacture of these rubbers will employ a new process which has been developed in large scale pilot plant operations over the past year and will provide tire manufacturers with a line of high quality, abrasive-resistant products.

Freeport, Texas Gulf in Joint Sulfur Export Venture

Freeport Sulphur Company and Texas Gulf Sulphur Company, both New York, have formed a joint export marketing subsidiary to handle their sulfur sales outside the North American continent.

The new corporation will be known as Sulphur Export Corporation and will have headquarters in New York. President of the new organization is Peter Black, formerly manager of Freeport's export sales. C. T. Hill, previously president of Texas Gulf Sulphur Export Corporation, a Texas Gulf subsidiary, is chairman of the new export concern.

Officials of Freeport and Texas Gulf indicated that the other major US sulfur producers—Jefferson Lake Sulphur Company of New Orleans, La., and Duval Sulphur & Potash Corporation of Houston, Tex.—would be invited to join the venture.

Under the terms of the Webb-Pomerene act, which permits the formation of single corporations within an industry for the purpose of handling export business, Freeport and Texas Gulf must advise the Federal Trade Commission of their joint organization.

Webb-Pomerene allows thirty days after the establishment of such an export venture for filing with FTC. An OPD query with the agency last week revealed that no such notice had yet been received from Freeport and Texas Gulf.

Sulphur Export existed previously from 1922 until 1952. It was disbanded at that time because sulfur supplies were very

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Pesticides Aplenty, Gov't Says, But New Chemicals May Be Tight

Farmers should have little trouble filling their pesticides needs this year according to the Commodity Stabilization Service of the Department of Agriculture. In its annual report reviewing the pesticide situation for 1957-58, prepared by Harold H. Shepard of the agricultural chemicals staff, the department says that the only possible tight spots in the supply picture might show in some of the newer bug killers.

VICE-PRESIDENTIAL AID: Carl Smith, named staff assistant to the vice-president of Michigan Alkali Division, Wyandotte Chemicals Corporation, Wyandotte, Mich.

"Requirements for old materials—those in commercial use for several seasons or more—should be met with relative ease," the report states. "Pesticides recently developed to compete with the older ones or to meet special needs are those most likely to be in short supply."

Manufacturers made some significant adjustments in their production schedules last year which were reflected in a breakdown of the industry's totals for the year. This was especially true for benzene hexachloride which, on the gamma basis, was down to 47 percent of 1956 production.

Calcium Arsenate Off 25 Percent

Calcium arsenate was down almost a fourth while substantial increases were made in the 2,4-D acid, esters and salts.

Production of synthetic organic chemicals intended primarily for use in pesticidal preparations has grown steadily to a total of 569,927,000 pounds in 1956 from the 1953 production of 355,953,000 pounds.

Production of inorganic pesticides has remained fairly constant for several years at roughly 450 million pounds annually, nearly two-thirds of which is ground sulfur.

Domestic disappearance during the 1957 season of such major pesticides as benzene hexachloride, calcium arsenate, DDT, 2.4-D and 2,4,5-T was down appreciably from the previous year. This was undoubtedly offset in some degree, the report says, by the growing development and use of newer materials, especially organic phosphorus insecticides, for which few statistics are available.

Exports of pesticides in 1957 increased 5.1 percent in dollar value over the previous calendar year to a total of $86,002,000.

The carryover of pesticides as of September 30, 1957, was about as large on

Continued on page 67

Stauffer Acquires Anderson Chemical

Stauffer Chemical Company, New York, has acquired all the outstanding stock of Anderson Chemical Company, Weston, Mich. Involved were 18,169 shares of Stauffer common which were issued in exchange for 19,006 shares of Anderson.

Anderson produces and markets a number of specialty chemicals including esters of boron and silicon, pharmaceutical intermediates and organo-metallic compounds. Its recent efforts have been directed mainly to the latter field. Several chemicals not yet marketed commercially

—Continued on page 53

Nuclear Corp. Reduces Rare Earth Oxide Prices

Nuclear Corporation of America, Burbank, Calif., is reducing the prices of a number of rare-earth oxides and salts 40 to 90 percent.

The cuts, according to the company, were made possible by increased volume stemming from the discovery of new applications for the compound.

The sharpest reduction was in the price of 99 percent purity lutetium oxide—from

—Continued on page 34

Wyandotte Listings Down On Block Polymer Lines

Wyandotte Chemicals Corporation, Wyandotte, Mich., has announced price reductions on both "Piuronic" and "Tetronic" series of block polymers. Effective May 15, the company started shipping these products on a freight prepaid and allowed basis within the United States.

In addition to the savings made possible by the billing change, actual price reductions for the "Pluronic" series amounted to 1 cent per pound in drum quantities for most grades and approximately ¼-cent per pound for some grades in tank car quantities.

Tankcar prices of the "Tetronic" series have been reduced 1¼-cents per pound; carlots, 3 cents per pound, and less carlots, 4 cents per pound for most grades.

The Week's Price Changes

Ferric Chloride, Fishmeal, Geranium Oil, Mercury Advanced. Gluconic Acid, Lemongrass Oil, Litharge Reduced.

Prices Advanced

Cardamoms, Guatemala decorticated, 15c. per lb. (p. 55).
Alleppey decorticated, 10c. per lb.
Cassia, Padang "A," 3c. per lb. (p. 55).
"B," 3c. per lb.
"C," 4c. per lb.
Korintje "A," 3c. per lb.
"B," 3c. per lb.
"C," 4c. per lb.
Castor oil, No. 1, Brazilian, ¼c. per lb. (p. 61).
Cocoa butter, 3½c. per lb. (p. 61).
Corn oil, crude, ¼c. per lb. (p. 61).
Refd., ¼c. per lb.
Cottonseed oil, crude, ¼c. per lb. (p. 61).
Refd., ¼c. per lb.
Ferric chloride, sewage grade, 25c. per cwt. (p. 32).
Fishmeal, Atlantic coast, Gulf, $2 per ton (p. 47).
Fishscrap, Atlantic coast, Gulf, $1-$2 per ton (p. 47).
Geranium oil, Bourbon, $2.50 per lb. (p. 55).
Grapefruit oil, Florida, 30c. per lb. (p. 55).
Greases, ¼c. to ¼c. per lb. (p. 61).
Lard, cash, ¼c. per lb. (p. 61).
Mercury, $1 per flk. (p. 32).
Peanut oil, crude, ½c. per lb. (p. 61).
Refd., ¾c. per lb.
Soybean oil, crude, ¼c. per lb. (p. 61).
Refd., ¼c. per lb.
Tallow, ¼c. per lb. (p. 61).

Prices Reduced

Almond oil, sweet, 25c. per lb. (p. 55).
Anise oil, 25c. per lb. (p. 55).
Blood, Chicago, 50c. per unit-ton (p. 47).
Coconut oil, crude, ¼c. per lb. (p. 61).
Cyclohexane, tanks, dlvd. E., 7c. per gal. (p. 44).
Dodecylbenzene, tanks, 3/10c. per lb. (p. 44).
Eucalyptus oil, 70%-75%, 1c. per lb. (p. 55).
80%-85%, 1c. per lb.
Fennel seed, French light, ½c. per lb. (p. 55).
Gluconic acid, tech., tanks, 3½c. per lb. (p. 39).
Iodine, resublimed, 30c. per lb. (p. 49).
Lead metal, ½c. per lb. (p. 32).
Lead, red, ½c. per lb. (p. 57).
Lemongrass oil, 5c. per lb. (p. 55).
Litharge, ½c. per lb. (p. 57).
Mineral orange, ½c. per lb. (p. 57).
Pepper, Malabar black, ½c. per lb. (p. 55).
Lampong black, ¼c. per lb.
Muntok white, ½c. per lb.
Petitgrain oil, South American, 5c. per lb. (p. 55).
Platinum, $1 per oz. (p. 32).
Potassium iodide, 47c. per lb. (p. 49).
Sodium gluconate, ¾c. per lb. (p. 49).
Sodium iodide, 44c. per lb. (p. 49).
Soybean meal, $1.50 per ton (p . 61).
Tankage, Chicago, 50c. per unit-ton (p. 47).
Tin, ½c. per lb. (p. 32).
Wattle bark, $4 per ton (p. 37).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

May 19, 1958	May 9, 1958	May 17, 1957
109.91	109.92	110.44

Linde Plans Biggest Oxygen Unit

Linde Company has just signed a contract to build what it says will be the largest capacity high-purity gaseous oxygen plant in the free world. The installation will be erected on United States Steel Corporation property south of Pittsburgh, Pa., and will provide oxygen for four of U. S. Steel's huge plants on the Monongahela river. Provisions are being made for future extension of the unit so that it may provide oxygen for a fifth steel plant.

Linde, a New York-headquartered division of Union Carbide Corporation, said the installation will be located at U. S. Steel's Duquesne Works and will distribute oxygen to the other three plants by pipeline. They are the Homestead, Edgar Thomson and National Works of National Tube Division.

The fifth installation, expected to get oxygen through a pipeline system in the future, is the Carrie Furnaces.

Linde described the unit as a 1,000-ton-per-day plant, able to turn out the equivalent of 730 million cubic feet of 99.5 percent pure oxygen per month.

The plant is evidence of U. S. Steel's

—Continued on page 63

l-Lysine Price Is Reduced $4 a Pound by duPont Co.

E. I. duPont de Nemours & Co., Wilmington, Del., has reduced the price of l-lysine monohydrochloride $4 per pound. The price reduction, from $12 to $8 per pound, is effective today.

Although lysine is still being produced in pilot plant quantities, the lower price marks one more step toward commercial production of this nutrient, duPont said.

PLASTICS MARKETING MGR.: R. G. Head, appointed marketing manager for its plastics and resins division by American Cyanamid Company, New York.

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GREEFF ELECTS TWO NEW VICE-PRESIDENTS: Harry Y. de Schepper (left) and Charles E. Griffith (right), who have been elected vice-presidents of R. W. Greeff & Co., New York. Both men have been with the company over twenty years and also are members of the board of directors.

Olin High-Energy Fuels Plant Seen as Weapon for Free World

The free world received a big new weapon from Olin Mathieson Chemical Corporation last week when the first full-scale production plant for high-energy fuels began operations near Niagara Falls, N. Y. The unit was built by Olin for the navy and simultaneous with its opening came an announcement that for the first time high-energy fuel can now be made as a solid rocket fuel that is "hotter" than solids currently used.

HEADS NEW PICCO DEP'T: James F. Pflum, named manager of its new sales service engineering department by Pennsylvania Industrial Chemical Corporation, Clairton, Pa.

Dr. L. Kermit Herndon, vice-president and head of Olin's high-energy fuel division, reported that shipments from the facility will be made to both the navy and air force.

The plant will produce boron-based liquid HEF-2 and was built at a cost of $4.5 million. Adjacent to the facility, construction continues on a $45 million air force plant which is scheduled for completion some time next year.

Navy Secretary Signals Start-Up

Secretary of the Navy Thomas S. Gates, jr., took part in dedication ceremonies by pressing a switch in Washington, D. C., that signalled start of output in the plant at Model City, seventeen miles north of Niagara Falls.

Rear Adm. L. D. Coates, Assistant Chief, Bureau of Aeronautics for Research and Development, turned a valve that put the plant into production after the signal from Washington.

He said at the ceremonies that the navy's portion of the fuel will be used for further development work and cited an urgent need for continuing research and development in this field.

As part of the ceremonies, a special demonstration apparatus burned hydrocarbon fuel used in jet aircraft and the new chemical HEF-2. They were ignited simultaneously and were burned side by side in a single chamber. Oxygen was reduced in the chamber to simulate an increase in altitude. The jet flame from conventional fuel flickered and died

—Continued on page 59

Jefferson Lake Selling Operations in Canada

Jefferson Lake Sulphur Company, which initiated the organization of Jefferson Lake Petrochemicals of Canada, Ltd., is now taking another step with the selling of its Canadian sulfur operations to the new company.

Jefferson Lake Petrochemicals' principal initial activities will consist of production of sulfur from purchased hydrogen-sulfide gas in an existing plant in British Columbia, and the development of sources of "sour gas" in Alberta for production of sulfur, commercial pipeline gas, liquefiable petroleum gases and natural gasoline.

Sulfur production will be the company's main business, and the location of the

—Continued on page 36

Cutter Buys Hollister-Stier For Common Stock Shares

Cutter Laboratories, Berkley, Calif., has bought the two Hollister-Stier Corporations, located at Spokane, Wash., and Quincy, Ill., in exchange for an undisclosed number of shares of Cutter common stock.

Hollister-Stier produces allergy products and has laboratories in Spokane, Los Angeles, Chicago and Philadelphia. Cutter makes biologics, blood product specialties and hospital products.

Gov't Vaccine Pricing Case Seen as a Warm-Up for Attack On Other Producers of Drugs

The government, leveling charges of price fixing last week against five major Salk vaccine producers, may have been only warming up for a long series of harassments of the pharmaceutical industry. That is what veteran observers of the Washington scene were saying at the end of the week. After the first shock of the charges had worn off, the government's plans came into clearer perspective and it appeared that there would be heavy weather ahead for the drug business.

The rough waters into which the drug men appear to be sailing, after a period of relative calm, are seen as the result of criticism against industry practices that were never satisfactorily explained to members of congress.

What Might Follow

Last week's indictment of the drug makers would probably be followed up, it is thought, by:

- Possible civil action being brought by the Department of Justice against the Salk polio producers for damages because of alleged "over-charges" on vaccine bought by public authorities.
- Criticism by the Federal Trade Commission of the antibiotic drug producing industry for practices which it feels result in high costs of these drugs to consumers.
- Additional investigations by the Justice department of possible price fixing in the sale of other drugs and hospital supplies.

Leading up to the expected stern attitude of the government were such factors as complaints several years ago by the house appropriations committee on the cost of drugs purchased by the Veterans Administration, and the criticism by the Fountain committee last year of the government's handling of the vaccination program.

Last week's indictment of the polio vaccine producers stems directly from the investigations of the latter group and Rep. L. H. Fountain predicted that they will be followed by a "comprehensive and far-reaching investigation" of other alleged price fixing activities in the drug and hospital supplies industries.

Named in the indictment charging violations of the Sherman act on two counts, each of which are subject to fines up to $50,000, were the following:

Eli Lilly & Co., Indianapolis, Ind.; Pitman-Moore Company, Indianapolis, a division of Allied Laboratories, Inc.; Wyeth

—Continued on page 54

Russia Has Big Ideas To Make More Chemicals

The Soviet Union will increase its chemical production two to three times by 1965, if Premier Nikita S. Khrushchev has his way.

That's the nub of a plan submitted last week by Mr. Khrushchev and promptly approved by the Central Committee of the Russian Communist Party.

The scheme calls for the USSR to expand within the next seven years in the following areas:

Synthetic fibers—4.6 times.
Plastics and synthetic resins—8 times.
Synthetic rubber—3.4 times.

To help the Russians achieve their goals, Mr. Khrushchev proposed that "sizable orders" for chemical processing equipment be placed in the United States, Great Britain and West Germany.

Monsanto Doubling Facilities

Monsanto Chemical Company, St. Louis, Mo., is doubling facilities for the production of "Lytron 680" at its plastics division plant in Springfield, Mass. The expansion is scheduled for completion next month.

PRESIDENT OF NEW CORPORATION: R. W. Atkinson, appointed president of newly-formed Allied Chemical, Ltd., Montreal, which will be successor to Barrett Company, Ltd.; Brunner Mond, Canada, Ltd.; National Aniline & Chemical Company, Ltd.; Nichols Chemical Company, Ltd., and Semet-Solvay Company, Ltd.

Drug Firms Shocked At Salk Pricing Case

"It is incredible that as a postscript to one of our greatest achievements, we should now have to face this fantastic suit." That is what an outraged Eli Lilly & Co. had to say last week.

The comment came in immediate response to the news that Lilly, along with four other major drug manufacturers, had been indicted for alleged price-fixing in the sale of Salk polio vaccine.

The statement by the Indianapolis, Ind. producer pretty well summed up the attitude of the other makers. At first, all were shocked almost into disbelief that the government would sue them after they had, under emergency conditions, produced for the American public a drug that had brought down the rate for paralytic polio by some 80 percent.

They recovered from their shock quickly, however, and each had a strong statement to make in vigorous denial of

—Continued on page 67

Pennsalt Will Consolidate

Pennsalt Chemicals Corporation, Philadelphia, will move the sales department and research and development activities of its corrosion engineering department to its Natrona, Pa., plant in September. Manufacturing, sales, and development activities will all be centered in Natrona under the direction of Robert R. Pierce.

Rayburn Likes Paint— In Moderation, That Is

"What could deface it (the Capitol) more than thirty-five coats of paint," the Hon. Sam Rayburn, speaker of the house, wanted to know following hearings on the proposed extension of the Capitol's east front.

What's the matter with paint, Joseph F. Battley, president of the National Paint, Varnish & Lacquer Association, demanded.

Nothing, said Mr. Rayburn. "There is nothing that paint doesn't help.

But, with all those coats on the Capitol, he went on, "you could not tell whether it is made of marble, sandstone, brick or just what."

TVA Observes Birthday by Offering Know-How

Tennessee Valley Authority has just celebrated its twenty-fifth birthday and is marking the occasion by offering free gifts to everybody—everybody in the fertilizer industry, that is.

What TVA has in the way of gifts are the technical information and experience developed by the huge public agency.

Charles H. Young, the agency's manager of chemical engineering, particularly wants the small fertilizer producers to familiarize themselves with what TVA has to give.

He says: "To an increasing extent, the fertilizer technology developed here is becoming applicable in the small fertilizer plant. We want to make sure that no small company fails to make use of the assistance available simply because it does not know about it, is apprehensive of the cost, or has the mistaken impression that TVA developments are useful only to large corporations."

Mr. Young points out that the research and development facilities at the Muscle Shoals, Ala., center are open to industry representatives and that research and operating personnel are available for consultation. Patent developments are licensed for industrial use without royalty or other charge.

As the agency rounded out its first quarter century on May 18, Muscle Shoals has become a mecca for fertilizer manufacturers, chemists, engineers and agronomists from all parts of the country, TVA adds. Some two-thirds of the granular fertilizer made in the United States is said to be produced with the TVA-developed continuous ammoniator-granulator.

Mr. Young described the following

—Continued on page 63

versatile CSC emulsifier and chemical intermediate

AMP

$CH_3C(CH_3)NH_2CH_2OH$

2-AMINO-2-METHYL-1-PROPANOL

use AMP as an emulsifier

AMP oleate is an economical emulsifier in water-wax emulsions. That's because AMP oleate is effective in lower concentrations than are required for comparable performance with other amine soaps. Emulsions made with relatively low concentrations of AMP oleate are stable and unchanged after repeated freeze-thaw cycles and heat stability tests. In properly formulated floor wax emulsions, AMP oleate imparts high gloss and excellent leveling characteristics.

The higher fatty acid soaps of AMP are powerful emulsifying agents in cleaners, polishes, dressings, self-polishing floor waxes, and emulsion-type paints. Evaporation loss and objectionable fumes are minimized during emulsion manufacture, due to AMP's relatively high boiling point. Films deposited from AMP-made emulsions have excellent water resistance and durability.

use AMP as a chemical intermediate

AMP forms substituted amides with esters, anhydrides, and acyl halides. AMP also reacts with alkyl halides, aldehydes, ketones, carbon disulfide, and many other compounds. These reactions suggest the use of AMP in the synthesis of surface-active agents, detergents, and vulcanization accelerators for rubber.

PHYSICAL PROPERTIES

Molecular Weight	89.14
Boiling Point, at 760mm	165°C
Melting Point	30-31°C
Specific Gravity at 20/20°C	0.934
pH of 0.1M Aqueous Solution at 20°C	11.3
Solubility	Miscible with water, aromatic hydrocarbons, alcohols, esters. Insoluble in aliphatic hydrocarbons.

SPECIFICATIONS

Neutral Equiv.	88.5-91.0
Color, APHA, max.	20
Water, by wt., max.	0.8%
Distill. Range	156°C-177°C
Below 161°C, max.	10%
Above 168°C, max.	5%
Odor	Characteristic
Non-volatile matter by weight, max.	0.005%

OTHER AMINOHYDROXY COMPOUNDS

AMPD (2-Amino-2-methyl-1, 3-propanediol) $CH_2OHC(CH_3)NH_2CH_2OH$

AEPD (2-Amino-2-ethyl-1, 3-propanediol) $CH_2OHC(C_2H_5)(NH_2)CH_2OH$

TRIS AMINO (Tris [hydroxymethyl] aminomethane) $(CH_2OH)_3CNH_2$

AB (2-Amino-1-butanol) $CH_3CH_2CHNH_2CH_2OH$

AMP is another important chemical derived from CSC's Nitroparaffins. For samples and additonal information write to:

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CSC INDUSTRIAL CHEMICALS

HEADS PULP CHEMICALS ASS'N: R. J. Spitz, vice-president of Newport Industries Company, a division of Heyden Newport Chemical Corporation, New York, who has been elected president of the Pulp Chemicals Association, succeeding the late Albert Scharwachter.

Chemical Export Drop A Result of Recession

The recession is having its effect in the export of chemicals as well as in other fields of business. This was apparent last week when government figures showed a slight drop from the comparable period last year.

According to preliminary estimates of the Bureau of Census last week, exports of the chemical group during the first three months of 1958 totaled $331.8 million as compared with $338.2 million during the same three months last year.

The decline was due entirely to the slump in March as both January and February exports were ahead of those of the same months last year.

March exports were valued at $120.5 million. This compares with $139.2 million for March, 1957. The February total was $107 this year and $98.9 million last year. January exports were $104.3 million this year and $103.1 million a year ago.

The pattern of exports for chemicals and allied products was similar to that experienced by all merchandise. March exports of all merchandise rose 16 percent to $1,556.8 million from the February

—Continued on page 56

Nat'l Cylinder Gas Starts Construction of New Unit

National Cylinder Gas Division of Chemetron Corporation, Chicago, has started construction on a $3 million liquid oxygen and argon plant near Philadelphia.

The plant will provide a direct pipeline supply of oxygen to be used in the new H-iron process of iron powder production at a Conshohocken, Pa., plant recently announced by Alan Wood Steel Company.

The plant's initial production capacity of more than sixty-five tons of liquid oxygen, nitrogen and argon per day can be expanded as demand increases.

Purchasing Agent Is Important In Any Industry but Chemicals; There He Is Called Strategic

In any other industry, the purchasing agent's function is important, but in the chemical industry it goes beyond that—it becomes strategic. That is the way Nelson C. White, a top level executive in International Minerals & Chemical Corporation, looks at it. He asserts that the P.A.'s job is particularly valued because purchases are, by a wide margin, the biggest single chemical industry expense. They run, he observes, close to 60 percent of the industry's entire sales volume.

In the chemical industry, "wise purchasing is one of the very few remaining ways of cutting production costs," Mr. White feels.

Management Aware of Purchasing

The increasing research devoted to the purchasing operation—purchase and value analysis and cost reduction—is one more sign that alert managements are becoming more and more aware of the strategic purchasing role," he adds.

Mr. White has formulated his opinions during a career that led to his position as vice-president of International Mineral's potash division. He made them known last week before the Chemical Buyers' Group of the National Association of Purchasing Agents, at the latter's annual meeting in Chicago.

"Where our own industry—the chemical industry—is concerned, our rate of progress and achievement can depend, in large measure, on you—the purchasers for the industry. Much of the success of our companies—your company and mine—may be determined, in the days ahead, by your knowledge of markets and economic conditions, your purchasing skill, your imagination and receptiveness to new ideas and your faith in the continued ability of our industrial society to provide a better life for all. I am confident that you will meet these challenges eagerly and successfully," Mr. White continued.

Projecting the purchasing agent's work into the future, Mr. White went on:

"It would seem to me, also, that if our

—Continued on page 66

Nelson C. White

Plant Food Meeting To Hear Treasury Man

Fred C. Scribner, jr., under Secretary of the Treasury, will be the principal speaker at the annual meeting of the National Plant Food Institute, at the Greenbrier hotel, White Sulphur Springs, W. Va., June 15 to 18.

Other features on the program will include two panels on "Changing Farmers' Attitudes Toward Fertilizer" and "Changing Farmers' Fertilizer Practices" plus a time-lapse motion picture on "Watching Fertilizer Work."

Officers of the institute estimate the attendance will be approximately 1,000 fertilizer manufacturers, scientists, and other agricultural leaders.

Meetings of the institute's executive committee and board of directors are

—Continued on page 42

Lederle Man Is Chairman Of Chemical Buyers Group

A. T. Ericson of Lederle Laboratories Division, American Cyanamid Company, Pearl River, N. Y., was elected national general chairman last week by the Chemical Buyers Group of the National Association of Purchasing Agents.

Elected first vice-president of the organization is C. W. McNeil of Pittsburgh Coke & Chemical Company, Pittsburgh, Pa. J. W. Saville of American Viscose Corporation, Philadelphia, is second vice-president.

Lester Davis of Pitman-Moore Company, a division of Allied Laboratories, Inc., Indianapolis, Ind., has been elected secretary of the group, while A. M. Eggeman of Rexall Drug Company in St. Louis, Mo., is its new treasurer.

Chairman of the fine chemical and pharmaceutical section is Robert G. Weigel of Eli Lilly & Co., Indianapolis. Norman Stiles of Chemstrand Corporation, Decatur, Ala., has been elected chairman of the heavy chemicals section.

American Potash Elects Lindsay Director, V. P.

American Potash & Chemical Corporation, Los Angeles, has increased the number of directors from nine to ten and elected Charles R. Lindsay, 3rd, a director and vice-president of the company. Mr. Lindsay is president of Lindsay Chemical Division of American Potash. The merger of Lindsay Chemical Company into American Potash became effective May 1.

Drugs Retailing Continues to Pose Major Problem

Proprietary drug manufacturers—termed "a part of the drug industry, not apart from it"—spent last week ruminating on the retail sales controversy that has been plaguing their industry. Though they came up with no new answers, they aired arguments for broader distribution to meet the needs of a growing population.

President Sherwood E. Silliman of the Proprietary Association, in his opening address before the group's annual convention in White Sulphur Springs, W. Va., lamented that "the major occupation of our association and other pharmaceutical associations will center for some time on 'the extended controversy regarding the proper retail outlets for supplying drugs, medicines and poisons to the public.'"

Faith in Drug Trade Conference

Mr. Silliman felt, however, that a "beginning towards a solution may be now in the hands of the National Drug Trade Conference."

"If we can keep the channels of communications open," he argued, "some day a solution acceptable to all segments of our industry may be reached."

Detailing recent activities of the National Drug Trade Conference, Mr. Silliman cited a recent subcommittee report which included, as part of a program to develop a uniform state pharmacy act, the establishment of a committee to study all non-legend drugs for the purpose of listing those which would be restricted to distribution through pharmacists only.

Noting other measures to be taken along with the organization of the committee, Mr. Silliman said, "let's give the National Drug Trade Conference a chance to work the problem out." In a wistful note he added, "to this end, it would be most helpful if, in the meantime, there could be a moratorium on legislation relating to the revision of state pharmacy laws as they bear upon the exemption for proprietary

Continued on page 67

Trade Agreement Extension Stalemate Ends in Congress

The congressional stalemate over the trade agreements extension law, which threatened to wreck the administration's reciprocal trade program, has been broken and a compromise bill now seems assured of enactment. Administration blessings were given to the compromise last week and the extension resolution will reach the house floor shortly.

In return for five-year continuance of the trade agreements law plus authority to reduce tariffs an additional 25 percent, a new escape clause provision is to be written providing for faster action in relief cases involving national security, and giving more assurances that the decisions of the tariff commission will not be voided.

Key to the compromise was the acceptance of a provision giving congress a veto over Presidential rejection of Tariff Com-

—Continued on page 34

Association Meetings

Air Pollution Control Association, annual meeting, Sheraton hotel, Philadelphia, May 25-29.

American Chemical Society, national meeting, Chicago, September 7-12.

American Drug Manufacturers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 26-28.

Armed Forces Chemical Association, annual meeting, Traymore hotel, Atlantic City, N. J., June 5-6.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Biltmore hotel, New York, October 28.

Chemical Bureau Alumni Association, spring get-together, Lexington hotel, New York, May 22.

Chemical Institute of Canada, annual conference and exhibition, Royal York hotel, Toronto, Ont., May 26-28.

Chemical Market Research Association, annual meeting, Statler hotel, New York, May 20-21.

Chemical Specialties Manufacturers Association, midyear meeting, Netherland Hilton hotel, Cincinnati, Ohio, May 19-21.

Commercial Chemical Development Association, spring resort meeting, Niagara hotel, Niagara Falls, N. Y., June 4-6.

Drug, Chemical & Allied Trades section of New York Board of Trade, spring luncheon meeting, Waldorf-Astoria hotel, New York, June 17; annual meeting, Sagamore hotel, Bolton Landing, Lake George, N. Y., September 11-14.

Drug, Chemical & Allied Trades section of the Young Men's Board of Trade, annual Young Man of the Year award dinner, Park-Sheraton hotel, New York, October 16.

Federation of Paint & Varnish Production Clubs, annual convention and show, Cleveland Public Auditorium, Cleveland, Ohio, October 5-8.

Flavoring Extract Manufacturers Association, annual meeting, Edgewater Beach hotel, Chicago, May 18-21.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 12-14.

National Chemical Exposition, sponsored by Chicago section of American Chemical Society, International Amphitheatre, Chicago, September 9-12.

National Packaging Conference, sponsored by American Management Association, Statler hotel, New York, May 26-28.

National Packaging Exposition, sponsored by American Management Association, Coliseum, New York, May 26-30.

National Paint, Varnish & Lacquer Association, annual convention, Shoreham and Sheraton-Park hotels, Washington, D. C., October 27-29.

National Plant Food Institute, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., June 15-18.

National Plastics Exposition, sponsored by Society of Plastics Industry, International Amphitheatre, Chicago, November 17-21.

Parenteral Drug Association, Edgewater Beach hotel, Chicago, June 6.

Salesmen's Association of the American Chemical Industry, chemical sales clinic, Roosevelt hotel, New York, October 20.

Society of Chemical Industry, American section, chemical industry medal dinner, Royal York hotel, Toronto, Ont., September 18.

Society of Plastics Industry, annual national conference, Morrison hotel, Chicago, November 17-21.

Synthetic Organic Chemical Manufacturers Association, annual outing, Shawnee Inn, Shawnee, Pa., May 26-28.

Toilet Goods Association, Charles S. Welch awards luncheon, Waldorf-Astoria hotel, New York, May 22.

Toilet Goods Association, scientific section, Waldorf-Astoria hotel, New York, June 5; annual convention, Poland Spring hotel, Poland, Me., June 25-29.

NOW–add this Powerful Sales Point at lower-than-ever cost!

"Won't skin over" can be a potent additional reason to choose your coatings! You can now add this sales point—economically—with National Antioxidant B®!

National Antioxidant B is based on the essential ingredient that effectively retarded skinning in a wide range of formulations during the most exhaustive, unbiased tests ever reported*. Only 1 to 4 lb. per 100 gallons needed. There is no appreciable change in drying time, durability, odor or color retention.

If you haven't re-evaluated anti-skinning agents lately, we urge you to get a current sample and quotation on National Antioxidant B. It now costs little to put a lot of extra sales-appeal in your line.

National ASA® — if preferred for some formulations — is also available at new low cost. For odorless paints, we offer National Antioxidant D**.

Allied Chemical

* As reported in Official Digest, Paint & Varnish Production Clubs, November 1956
** Trade Mark

NATIONAL ANILINE DIVISION ALLIED CHEMICAL & DYE CORPORATION • 40 RECTOR STREET, NEW YORK 6, N.Y.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, May 16 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 3.60 - 4.25

Acacia (see Arabic gum).

Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —

Above 92.5 C. m.p., bbls., dms., lb. .41 - .50

Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —

dms., l.c.l., works ..... lb. .13½- —

tanks, works ..... lb. .10 - —

Acetaldol (see Aldol).

Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld. lb. .32½- —

bbls., bgs., ton lots, frt. alld, lb. .33½- —

bbls., bgs., smaller lots, frt. alld. lb. .36½- —

USP, bbls., 225-lb. dms, any quantity, lots lb. .79 - —

100-lb. dms., any quantity lb. .81 - —

Acetic acid, coml. or redist, 28%, bbls 100 lbs. 4.80 - —

56%, bbls. ..... 100 lbs. 8.25 - —

70%, bbls. ..... 100 lbs. 9.95 - —

80%, bbls. ..... 100 lbs. 10.45 - —

Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs. 22.00 -23.00

tech., dms., c.l., dlvd .... 100 lbs. 13.75 - —

dms., l.c.l., dlvd ..... 100 lbs. 14.25 - —

tanks, dlvd. ..... 100 lbs. 10.00 - —

USP, cbys., incl., dlvd 100 lbs. 31.00 -32.00

Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .16½- —

aluminum ret. dms., l.c.l., dlvd. E. lb. .17½- —

tanks, dlvd. E. ..... lb. .14 - —

Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —

fib. dms., l.c.l. dlvd. ..... lb. .81 - —

Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —

fib. dms., l.c.l., dlvd ..... lb. 1.36 - —

Acetoacet-o-toluidide, fib. dms., c.l., dlvd lb. .82 - —

fib. dms., l.c.l., dlvd ..... lb. .83 - —

Acetone, CP, dms., c.l., dlvd .... lb. .11 - —

dms., l.c.l., dlvd ..... lb. .12 - —

tanks, dlvd ..... lb. .08½- —

Acetonitrile, dms., c.l., works ... lb. .45 - —

dms., l.c.l., works ..... lb. .45¾- —

Acetophenetidin, USP, dms., works, frt. equald lb. 1.22 1.24

Acetophenone, cns., dms ..... lb. 1.30 - 1.60

Tech., dms., l.c.l., works ..... lb. .75 - —

N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85

Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —

cs., l.c.l., ex whse ..... lb. .24½- .30

Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —

USP, standard, fine, cryst. gran., (30-40 mesh) powd., (80 mesh). bbls., 1,000-lb. lots, same basis lb. .58½- —

Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —

non-ret dms., l.c.l., frt. alld. E. of Denver lb. .36½- —

tanks, frt. alld E. of Denver, lb. .33 - —

Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —

non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —

tanks, frt. alld. E of Denver lb. .37 - —

Acids

Acid quotations, formerly grouped under one heading, are now listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls ..... lb. .50 - .55

Acrolein, tech., dms., c.l., works lb. .47 - —

dms., l.c.l., works ..... lb. .47½- —

tanks, works ..... lb. .46 - —

Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —

dms., l.c.l., t.t.l., frt. equald .... lb. .31 - —

tanks, frt. equald ..... lb. .27 - —

Adeps lanae (see Lanolin).

Adipic acid, bgs., c.l., dlvd ..... lb. .32¼- —

bgs., l.c.l., dlvd ..... lb. .35 - —

Agar, USP, Kobe No. 1, strip, bls. lb. 1.90 - 2.00

powd., 30 mesh., fib., dms lb 2.50 - —

dl-Alanine, dms., works ..... lb. 8.50 -11.00

Albumin, blood, dark (see Blood, dried, soluble).

light, dms. ..... lb. .63 - .85

Albumin, egg, edible, cryst., powd., bbls lb. 1.26 - 1.28

flake ..... lb. 1.22 - 1.24

tech., cryst., bbls ..... lb. 1.08 - 1.10

Alcohols

Alcohol quotations, formerly grouped under one heading, are now listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldol, 95%, dms., works ..... lb. .23 - —

Denaturing grade, dms. ..... gal 2.15 - —

Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .90 - —

fib dms., l.c.l., dlvd. ..... lb. .95 - 1.05

Aletris root, bgs. ..... lb. 1.75 - 1.85

Algin (see Sodium alginate)

Alizarin (see 1,2-Dihydroxy anthraquinone).

Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies ..... lb. 2.38 - —

Alkali blue toner, litho flushed, 125-lb bbls., same basis. lb. 1.35 - —

Alkali blue prices 1c. higher W. of Rockies.

Allethrin, 90%, dms., frt. alld lb. 28.80 -28.90

Soln., 20%, dms., 200-2,000 lb. lots, frt. alld lb 6.50 6.55

2½% dms. frt alld ..... lb. .95 1.10

Allspice oil (see Pimento oil)

Allyl alcohol, dms., c.l., dlvd ... lb. .32½- —

dms., l.c.l., dlvd. ..... lb. .33½- —

tanks, dlvd lb .30 - —

Allyl bromide 55-lb. cbys 5,005 lbs. or more works lb 1.47 - —

55-lb. cbys. 1,045 to 4,950 lbs., works lb 1.52 - —

55-lb cbys. 55 to 990 lbs. works, lb. 1.57 - —

Allyl chloride, dms., c.l., dlvd. ... lb. .17¼- —

dms., l.c.l., dlvd. ..... lb. .18½- —

tanks, dlvd ..... lb. .15 - —

Allyl isocyanate (see Mustard Oil, syn.).

Almond oil, artif., bitter (see Benzaldehyde).

Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 - 3.45

NF, bots. ..... lb. 3.00 - 3.30

USP, sweet, cns., dms ..... lb. .90 - 1.40

Aloe, Cape cs. ..... lb. .50 - —

powd., cs ..... lb. .75 - —

Curacao, kgs. ..... lb. .60 - —

powd., kgs ..... lb. .80 - —

Aloin, USP, bbls., dms., kgs. ... lb 3.50 3.75

Alphanaphthol (see a-Naphthol).

Alphanaphthylamine (see a-Naphthylamine).

Alphanitronaphthalene (see a-Nitronaphthalene).

Alphapicoline (see a-Picoline).

Alphaterpineol (see a-Terpineol).

Alphatocopherol (see a-Tocopherol).

Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —

lump, dms., works ..... 100 lbs. 5.05 - —

powd., dms., works ..... 100 lbs. 5.20 - —

USP, burnt, dms ..... lb. .20 - .21

hydrous, dms. ..... lb. .07¾- .08

Alum, potassium, gran., bgs., works. 100 lbs 4.55 - —

lump, dms., works ..... 100 lbs. 5.30 - —

powd., dms., works ..... 100 lbs. 5.45 - —

USP, burnt., dms ..... lb. .20 - .21

hydrous, dms. ..... lb. .07¾- .08

Alum, potash-chrome, dms ..... lb. .17 - —

Alumina, calcined, bgs., c.l., works. lb. .0475- —

bgs., l.c.l., works ..... lb. .05 - .0775

Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —

Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .15 - —

dms., l.c.l., works ..... lb. .15½- —

cryst., dms., c.l., works 100 lbs. 16.00 - —

dms., l.c.l., works. .... 100 lbs. 16.50 - —

soln 32° cbys., c.l., works lb. .0445- —

cbys., l.c.l., works ..... lb. .0525- .1290

tanks, works ..... 100 lbs. 3.45 - —

NF, gran., dms., works ..... lb. .31 - .33

Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼- —

bgs., l.c.l., works ..... lb. .18¼- .2014

Aluminum fluoride in fib. dms. 0.35c. per lb higher

Aluminum formate, basic soln., dms., c.l., works lb. .12 - —

dms., l.c.l., works ..... lb. .12½- —

Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0335- —

bgs., 20,000-40,000 lb. lots, same basis lb. .0360- —

bgs., 2,000-20,000 lb. lots, same basis lb. .0460- —

bulk, c.l., same basis ..... lb. .0310- —

Aluminum hydroxide, dried, USP XV, fib dms. works lb. .82½- —

fib dms., contract, works lb. .79½- —

Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —

9-9½% Al_2O_3, fib dms., works lb 19 - —

fib dms., contract, works lb. .18 - —

Aluminum hydroxide, tech., powd. (See Aluminum hydrate).

Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2610- —

pigs, 10,000-lb. lots, frt. alld. lb. .24 - —

Aluminum oxide, amorphous (see Alumina, calcined).

Aluminum paste, lining, extra-fine, dms lb. .63½- —

Standard grade, dms. ..... lb. .46 - —

Aluminum powder, lining, extra-fine, dms lb. 1.09½- —

Standard grade, dms. ..... lb. .79½- —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c per lb for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U S a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over.

Aluminum resinate, precip., 2.1% t.t.l., dms lb. .36¼- —

Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —

ctns., l.c.l ..... lb. .40 - .44

Monobasic, ctns., c.l. ..... lb. .39 - —

ctns., l.c.l ..... lb. .40 - .44

Tribasic, ctns., c.l. ..... lb. .39 - —

ctns., l.c.l ..... lb. .40 - .44

Aluminum sulfate, coml., grd., bgs., c.l., works, frt. equald ton 41.00 - —

grd., bulk, c.l., same basis ton. 40.00 - —

lump, bgs., c.l., same basis ton. 44.00 - —

coml., iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —

bgs., l.c.l., works, frt. equald, 100 lbs. 3.95 - 7.95

USP, gran., dms., works ..... lb. .29 - .30

powd., dms., works ..... lb. .36 - .37

Aluminum sulfate prices $1 per ton higher in the South.

Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).

Ambergris, gray, bots ..... oz. 6.50 - 7.50

p-Aminoacetanilide, frt. alld. .... lb. 1.57 - —

Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75

Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18

p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —

Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —

dms., l.c.l., dlvd. ..... lb. .485 - —

tanks, dlvd. ..... lb. .45 - —

2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —

dms., l.c.l., frt. alld. ..... lb. .45 - —

tanks, frt., alld ..... lb. .42 - —

m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —

dms., smaller lots. ..... lb. 2.50 - —

p-Aminophenol, dms., frt. alld ... lb. 1.15 - —

Aminophyline, USP, 100-lb. dms lb. 3.55 - —

p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.70 - —

Ammonia, anhyd., fertilizer, tanks, works, frt. equald ..ton. 88.00 - —

refrigeration tanks works, frt. equald ton. 90.50 - —

Aqueous, 29.4%, tanks, works, anhyd. basis ..ton. 91.00 - —

Ammoniacal liquor (see Ammonia, aqueous).

Ammoniac, sal, gray, bgs., c.l., works, frt. equald ..100 lbs. 8.25 —

bgs., l.c.l., same basis ..100 lbs. 8.65 -12.65

Ammoniac, sal., white (see Ammonium chloride, tech.).

Ammonium acetate, purif., dms lb. .40 - —

Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —

fib dms. 1,000-lb lots, works, lb. 1.05 - —

Ammonium biborate, gran., dms., c.l., works ..ton. 324.50 - —

dms., ton lots, ex whse ..ton. 407.50 - —

dms., smaller lots, ex whse ..ton. 412.50 - —

Ammonium bicarbonate, dom., dms., c.l., works 100 lbs 7.00 —

dms., l.c.l., works ..... 100 lbs. 9.00 - —

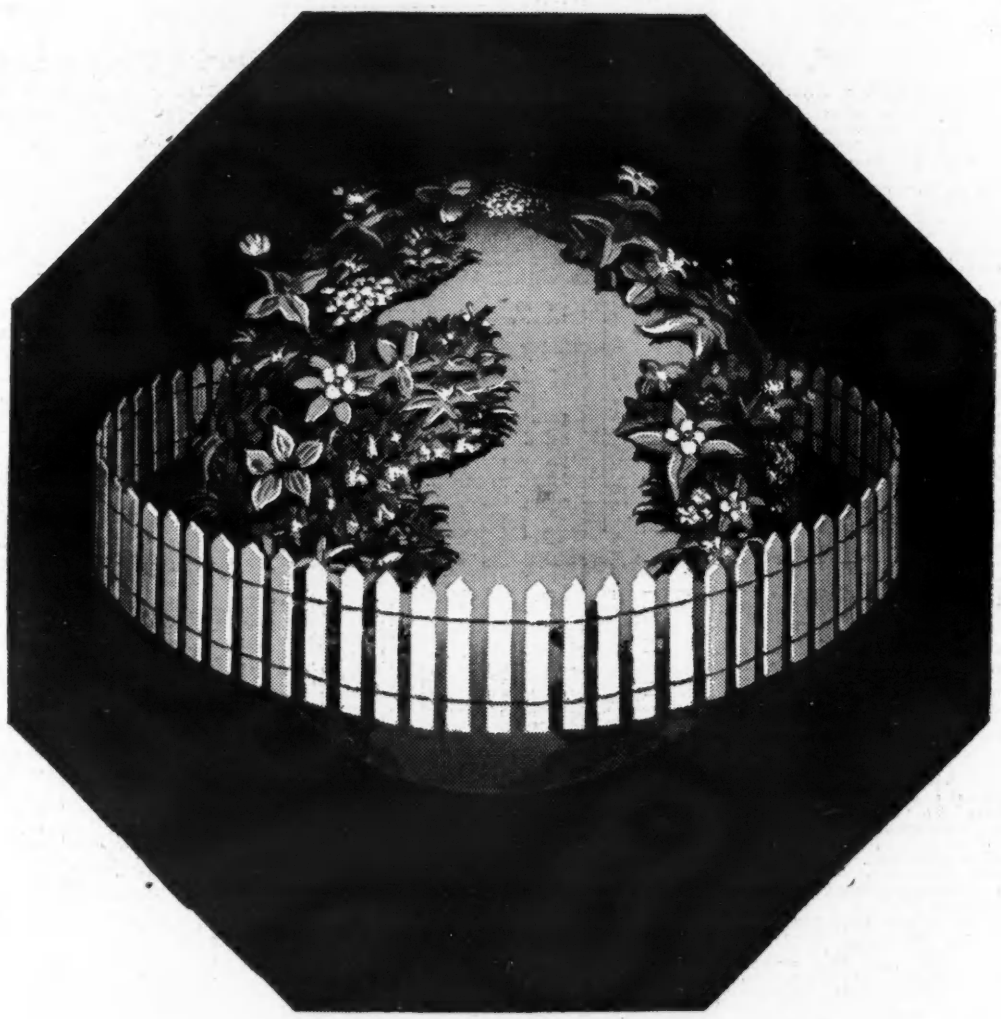
Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
approx.	approximately	equald.	equalized	pf.	proof
artif.	artificial	exp.	expressed	phos.	phosphate
ASTM	American Society for Testing Materials	Ext.	external	photo.	photographic
		F.	fahrenheit	pkgs.	packages
Atl.	Atlantic	ferment.	fermentation	powd.	powdered
Be.	Baume	f.f.a.	free fatty acid	precip.	precipitated
bbls.	barrels	f.f.c.	free from chlorine	prod.	producer
bgs.	bags	fib.	fiber	pt.	point
bls.	bales	f.o.b.	free on board	pulv.	pulverized
bots.	bottles	f.p.a.	free of prussic acid	purif.	purified
b.p.	boiling point	frt.	freight	redist.	redistilled
b.p.l.	bone phosphate of lime	gal.	gallon	refd.	refined
b.r.	boiling range	gran.	granular	refy.	refinery
bxs.	boxes	grd.	ground	reg.	regular
C.	centigrade	i.&a.	iron and aluminum	resub.	resublimed
cbys.	carboys	l.b.p.	initial boiling point	ret.	returnable
CD	completely denatured	imp.	imported	SD	specially denatured
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
cks.	casks	indust.	industrial	S E.	southeast
c.l.	carlots	kgs.	kegs	sec.	secondary
cns.	cans	l-	laevo	secs.	seconds
coml.	commercial	lacq.	lacquer	s.g.	specific gravity
conc.	concentrated	lb.	pound	shipt.	shipment
CP	chemically pure	l.c.l.	less than carlots	soln.	solution
cps.	centipoises	l.t.l.	less truckload	s.u.	standard unit
cryst.	crystalline	liq.	liquid	syn.	synthetic
cs.	cases	mfrs.	manufacturers	tanks.	railroad tankcars
ctns.	cartons	m-	meta	tech.	technical
cyls.	cylinders	m.a.p.	mixed aniline point	tert-	tertiary
d-	dextro	min.	minimum	t.l.	truck loads
dbl.	double	m.p.	melting point	t.w.	tank wagons
denat.	denatured	N-	nitrogen	USP	U. S. Pharmacopoeia
dest-dist.	destructively—distilled	n-	normal	vis.	viscosity
dl-	dextrolaevo	nat.	natural	VM&P	varnish makers & painters
dist.	distilled	neut.	neutral	W.	west
		NF	National Formulary	whse.	warehouse
		NNR	New and Nonofficial Remedies	w w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Ammonium bichromate, dms., works, lb. 42 - .43
Ammonium bifluoride, dms., dlvd lb. .2145 - .2245
Ammonium bromide, NF, gran., bbls, lb. .45 - —
Powdered ammonium bromide 10c. per lb. higher
Ammonium carbonate USP, lump, dms., c.l lb. .15½ - —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 - —
bgs., l.c.l., works 100 lbs. 7.75 - 8.20
USP, gran., fib. dms lb. .17¼ - —
Ammonium citrate, dibasic, bbls. lb. .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., dms. lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide, NF dms., bots, lb. 4.26 - 4.38
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .19 - —
dms., l.c.l., frt. alld lb. .20 - —
tanks, frt. alld lb. .18 - —
Ammonium linoleate, 60%, dms., works lb. .50 - .53
Ammonium molybdate, CP, cryst., fib dms., 15,000 lbs., works lb. 1.22 - —
fib. dms., 2,000-lb. contracts, works lb. 1.23 - —
single fib. dm., works lb. 1.24 - —
Ammonium nitrate, dom. fertilizer grade, 33.5% N, bgs., western works, frt. equald, base price ton. 72.00 - —
Ammonium nitrate, imp. Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton base price ton. 72.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton. 79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va ton. 49.75 - —
Ammonium oxalate, fine gran., dms., lb. .28½ - .30½
Ammonium pentaborate, gran., bgs., c.l., works ton. 193.00 - —
bgs., ton lots, ex whse ton. 284.50 - —
bgs., smaller lots, ex whse ton. 289.50 - —
Ammonium pentaborate powder $10 per ton higher.
Ammonium persulfate, tech., dms., 10-ton lots or more, works, lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼ - —
bgs. l.c.l. same basis lb. .10 - —
Ammonium phosphate, dibasic, NF, V bbls. dms lb. .48 - —
Tech., bgs., c.l., works, frt. equald, lb. .09¼ - —
bgs. l.c.l., same basis lb. .10 - —
Ammonium silicofluoride, dms., works lb. .11¾ - .13¼
Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l., works lb. .20½ - .27
Ammonium sulfate, coke-oven, bulk, producing ovens, base price ton. 32.00 - —
purif., dms., works lb. .10 - .10½
Syn., bulk, c.l., works ton. 34.00 - —
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton. 160.00 - —
Ammonium sulfocyanide, tech (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 - —
dms. l.c.l. works lb. .22 - .26
Ammonium thioglycollate, coml., chys., 100% basis lb. 1.35 - 1.65
Highly purif., chys. 100% basis. lb. 1.70 - 1.96
d-Amphetamine hydrochloride, di-basic bots lb. 18.00 - 28.00
dl-Amphetamine hydrochloride, di-basic bots lb 4.50 - 6.00
d-Amphetamine hydrochloride, mono-basic, bots lb. 18.00 - 28.00
d-Amphetamine phosphate, fib dms., 100-lb. lots lb. 14.50 - —
dl-Amphetamine phosphate bots lb. 4.50 - 6.00
d-Amphetamine sulfate, fib. dms., 100-lbs. lots lb. 16.50 - —
dl-Amphetamine sulfate, fib. dms., lb. 4.50 - 6.00
Amyl acetate, ex fusel oil, tech. dist., from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies lb. .18½ - .19
dms., l.c.l. same basis lb. .19½ - .20
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg. dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .20 - —
tanks, dlvd. lb. .16½ - —
Amyl acetate syn. oxo process, dms., c.l. dlvd lb. .20¼ - —
dms., l.c.l., dlvd lb. .21¼ - —
tanks, dlvd lb. .17¾ - —
Amyl acetate, tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
Amyl alcohol, ex fusel oil (see Fusel oil, refd.),
Amyl alcohol, ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45 - —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .18½ - —
dms., l.c.l. frt. alld lb. .19½ - —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld. lb. .20¼ - —
dms., l.c.l., frt. alld lb. .21¼ - —
tanks, frt. alld lb. .17¾ - —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .18½ - —
dms., l.c.l., frt. alld E lb. .19½ - —
tanks, frt. alld E lb. .16 - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½ - —
dms., l.c.l., works lb. .42½ - —
tanks, works lb. .39½ - —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.75 - 2.20
o-tert-Amyl phenol, dms., c.l., works. lb. .49½ - —
dms., l.c.l., works lb. .50½ - —
tanks, works lb. .47 - —
p-tert-Amyl phenol, dms., c.l. works. lb. .26¾ - —
dms., l.c.l., works lb. .27¾ - —
Amyl salicylate, cns., dms lb. .62 - 1.10
Amyris oil, dms lb. 1.30 - 1.40
Anethole, cns., dms lb. 1.25 - 1.70
Tech., dms. lb. .85 - .90
Angelica root, dom., bls lb. .60 - .65
Angelica root oil, bots lb. 120.00 - 130.00
Angelica seed oil, bots lb. 120.00 - 130.00
Aniline, dms., c.l., frt. alld lb. .20 - —
dms., l.c.l., frt. alld lb. .21 - —
tanks, frt. alld lb. .18 - —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 - —
dms. l.c.l same basis lb. .35 - —
Anise oil, USP, dms lb. 2.00 - 3.80
Anise seed, Mexican, bgs lb. .17 - —
Spanish, bgs. lb. .18½ - —
Anisic aldehyde, dms lb. 1.85 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 - —
dms., l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene, 90-95%, dms., c.l., t.l., f.o.b., works lb. .42½ - —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5%, bbls., c.l., frt. alld lb. .83 - —
bbls., l.c.l., same basis lb. .86 - —
Electrical grade, bbls., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines lb. .29 - —
cs. c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½ - —
bgs., l.c.l., frt. alld. lb. .26 - —
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots., dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, annyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dms. lb. .69½ - —
USP, powd., 250-lb. dms. lb. .74½ - —
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride USP 25-oz. lots oz. 35.60 - —
Apricot kernel oil, USP, dms lb. .85 - 1.10
Arabic gum, amber, sorts, bgs. lb. .21 - .23
USP, powd., bbls. lb. .26 - .29
Areca nuts powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
1-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
1-Arginine glutamate, 10-kilo lots or more, dms. kilo. 60.00 - —
1-Arginine monohydrochloride, 10-kilo lots or more, dms. kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb. 1.40 - 1.50
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., l.c.l., works lb. .06½ - .07½
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 - —
Light shades, bbls lb. 2.85 - —
Maroon shade, bbls lb. 3.70 - —
Asafetida gum, cns. lb. .40 - —
Powd., bbls., dms lb. .85 - —
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude,
6D, c.l. (30 tons), mines ton. 86.00 - —
7D, c.l. (30 tons), mines ton. 75.00 - —
7F, c.l. (30 tons), mines ton. 71.00 - —
7H, c.l. (30 tons), mines ton. 61.00 - —
7K, c.l. (30 tons), mines ton. 50.00 - —
7M, c.l. (30 tons), mines ton. 44.00 - —
7R, c.l. (30 tons), mines ton. 43.00 - —
7RF, c.l. (30 tons), mines ton. 44.00 - —
7T, c.l. (30 tons) mines ton. 44.00 - —
7TF, c.l. (30 tons) mines ton. 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP dms., 25-100 kilo lots kilo. 10.00 - —
dms., 10-kilo lots kilo. 10.35 - —
dms., 5-kilo lots kilo. 10.75 - —
bots., 1-kilo lots kilo. 12.00 - —
bots., 500-gram bots kilo. 12.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton. 40.00 - —
ex-whse, N. Y., N. J. ton. 83.56 - 86.50
seconds, 300°-390°F. fusing pt., bgs., c.l., mines ton. 35.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton. 41.00 - —
270°-295° F. fusing pt., bgs. c.l., mines ton. 40.00 - —
Asphalt, manjak No. 10 crude, dms., works lb. .06¼ - —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion tanks tankwagon refy. gal. .09½ - —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton. 21.00 - —
85-300 penetration, tanks, tankwagon, refy ton. 20.00 - —



All the World's our garden

S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 735 W. DIVISION ST., CHICAGO 10

Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins ..... oz. 6.00 - 7.00
Atropine sulfate, USP, bots. .... oz. 4.50 - 5.00
Avocado oil, cns ..... lb. 3.00 Nom.

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds dried, bgs lb. 1.25 - 1.35
Barberry root bark, bgs ..... lb. .28 - .30
Barbital, NF, 100-lb. dms ..... lb. 4.50 - —
Barbital sodium, NF dms ..... lb. 4.75 - —
Barium carbonate precip, bgs, c.l. works ton. 111.50 - —
bgs., smaller lots, works ton. 126.50 - —
Barium chlorate dms, works lb .32 .41
Barium chloride anhyd, bgs, c.l. works ton 178.00 —
bgs., l.c.l., works ..... ton. 186.00 - —
Barium chloride, NF cryst., 100-lb. dms lb .22 - —
Tech. cryst. bgs. c.l. works 100 lbs 7.00 —
bgs., l.c.l., works ..... 100 lbs. 8.00 - —
Barium chromate, bgs., frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton. 208.00 - —
bgs., l.c.l. t.l.l., frt. equald ..ton. 218.00 - —
Barium monoxide (see Barium oxide)
Barium nitrate bbls c.l. t.l. dlvd lb .16 - —
bbls. l.c.l. t.l.l. dlvd lb .17 - —
Barium oxide grd dms, c.l. t.l. frt equald ton 275.00 - —
dms. l.c.l. t.l.l. frt equald ton 285.00 —
Barium peroxide dms. frt. equald. lb. .20 - —
Barium stearate, ctns. c.l., frt. alld. lb. .41 - —
ctns., l.c.l., same basis ..... lb. .43 - .46
Barium sulfate, tech. (see Barytes and blanc fixe)
Barium sulfate, X-ray, dms. ... lb. .15 - .15½
Barium sulfide, dms., c.l., works. ton. 100.00 - —
dms., l.c.l., works ..... ton. 110.00 - —
Barytes, southern off-color, bgs. mines ton. 25.00 - —
95-75% bgs. mines ton. 25.00 - —
white, water-grd., paper bgs. c.l., St. Louis ton. 55.00 -55.25
paper bgs. ex whse. New York ton. 79.85 —
Battery acid, cbys. c.l. works, E 100 lbs 2.35 —
cbys., l.c.l., works E ..... 100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton 7.00 10.00
Bay oil, NF, Puerto Rican, 50-55%, cns lb. 2.10 - 3.05
55-60%, cns. ..... lb. 2.50 - 3.05
West Indian 50-55% cns. dms. lb. 1.95 - 3.00
Bayberry wax, bgs ..... lb. .45 .47
Beeswax, crude, African, bgs .... lb. .58 - .59
Brazilian bgs. ..... lb. .67 Nom.
Central American, bgs ..... lb. .60 Nom.
Chilean, bgs. ..... lb. .67 Nom.
Beeswax, refd., USP, bleached, white, bricks, 100-lb. ctns lb. .73 - .75
white, slabs, 100-lb. ctns .. lb. .72 - .74
yellow bricks, 100-lb. ctns ... lb. .67 - .69
yellow, slabs, 100-lb. ctns ... lb. .66 - .68
Belladonna leaf, bls. ..... lb. .38 - —
Belladonna root bls ..... lb. .30 - —
Bentonite, dom., 200 mesh, bgs., c.l., mines ton. 14.00 - —
imp., Italian, white, high gel. bgs., 5-ton lots, ex whse ton. 91.00 - —
bgs., 1-ton lots ex whse ton. 94.00 - —
low gel. bgs., 5-ton lots ex whse ton. 89.35 - —
bgs., 1-ton lots, ex whse .ton. 92.35 - —
Benzal chloride, cbys. works .. lb. .44 - —
Benzaldehyde NF dms ..... lb. .80 - .86
Tech., cbys. dms., t.l ..... lb. .43 - —
cbys., smaller lots ..... lb. .44 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem Pa gal. 36 - —
Birmingham district ... gal. 36 - —
Chicago district ..... gal. 36 - —
Cleveland district ..... gal. 36 - —
Geneva Utah ..... gal. 36 - —
Johnstown Pa ..... gal. 36 - —
Lackawanna N Y ..... gal. 36 - —
Lone Star Tex ..... gal. 36 - —
Lorain Ohio ..... gal. 36 - —
Middletown Ohio ..... gal. 36 - —
Minnequa Colo ..... gal. 36 - —
Philadelphia district ... gal. 36 - —
Pittsburgh district ... gal. 36 - —
Sparrows Point Md ... gal. 36 - —
Syracuse N Y ..... gal. 36 - —
Terre Haute Ind ..... gal. 36 - —
Youngstown Ohio ..... gal. 36 - —
Benzene, petroleum, Houston, Tex., tanks gal. 36 .38
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech. high gamma dms. c.l. dlvd. gamma unit-lb. .00825- —
dms. t.c.l. works gamma unit-lb. 009 .0095
low gamma dms. c.l. dlvd. gamma unit-lb. .00825- —
dms. t.c.l. works gamma unit-lb 009 —
Benzidine hydrochloride, bbls., c.l. frt alld. 100% basis lb 1.19 —
bbls. t.c.l. same basis lb 1.21 —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow AAA bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. ..... lb. 2.55 - —
Lightfast, bbls., dlvd. ..... lb. 3.40 —
Benzocaine dms lb 3.43 3.50
Benzoic acid tech. c.l. t.l., frt. alld. lb .37 —
ton lots, same basis .. lb. .41 - —
1,000-lb. lots, same basis ... lb. .43 - —
USP, ton lots ..... lb. .48 - —
1,000-lb. lots ..... lb. .50 - —
Benzoin gum Sumatra es .. lb .33 —

Benzol

Benzol quotations, both coaltar and petroleum, may now be found under Benzene.

Benzophenone dms lb 1.40 1.70
Benzotriazole tech. dms. 1,000-lb. lots, works lb 2.25 —
Benzotrichloride, cbys. 1,000-lb. lots or more frt. equald lb. .21 —
cbys. smaller lots frt equald lb .23 —
Benzoyl chloride, cbys., dms., c.l., works frt equald lb .22 —
cbys. t.c.l. same basis lb .23 —
tank trucks dlvd Metropolitan area lb .21 —
Benzoyl peroxide purif. fib dms., 50 to 1,000-lb lots works lb .98 1.08
Benzyl acetate, t.f.c. cns. dms lb. .65 .79
Benzyl alcohol NF, dms lb. .65 .80
Tech., dms., dlvd ..... lb. .47½- .65
Benzyl benzoate, NF, 40-lb. dms., lb. .63 - —
Benzyl chloride tech. cbys. dms., c.l. works frt equald lb. .22½ 25¼
cbys. dms. t.c.l. same basis lb. .23½ 25¼
tank trucks dlvd Metropolitan area lb .21 —
A 2½c. differential is quoted on benzyl chloride in 5-gal cbys in steel dms prices are ½c lower
Benzyl cinnamate, cns ..... lb. 3.30 3.60
Benzyl dimethylamine, dms. works lb 2.25 —
Benzyl formate, cns ..... lb. 1.85 2.10
Benzyl isoeugenol, cns. ..... lb 9.85 —
Benzyl propionate, bots. ..... lb 1.35 1.65
Benzyl salicylate, bots ..... lb 1.60 1.85
Benzylidine acetone, bots ..... lb 1.75 1.80
Benzylidine chloride (see Benzal chloride)
Berberine bisulfate, cns lb 35.00 -36.25
Berberine hydrochloride, bots. lb 35.00 36.25
Bergamot oil, nat. NF, Italian, cns lb. 12.75 -13.75
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methyl naphthalene)
Betanaphthol (see b-Naphthol)
Betanapnthylamine (see b-Napnthylamine)
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride tech.)
Biotin, cryst. bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. ..... lb 1.50 1.90
Rectified, cns ..... lb 1.75 1.85
Bismuth chloride, lars ..... lb 5.11 —
Bismuth hydroxide, dms ..... lb. 4.60 - 4.65
Bismuth metal, bgs, ton lots lb 2.25 —
Bismuth nitrate, cryst., dms ... lb. 2.08 - 2.17
Bismuth oxide, anhyd, dms lb 4.47 5.05
Bismuth oxychloride, dms lb 4.37 4.42
Bismuth subcarbonate, USP, dms lb 3.20 —
Bismuth subgallate, NF, fib, dms lb 3.15 —
Bismuth subiodide, fib, dms lb 5.37 - —
Bismuth subnitrate, NF, dms lb 2.65 —
Bismuth subsalicylate, USP, dms lb 3.50 —
Bismuth-ammonium citrate, USP, powd. lars lb 4.22 —
Bisphenol A, bgs, c.l. t.l. frt. alld. lb. .30 —
bgs. l.c.l. same basis ..... lb. .31 —
Blackberry root bark, bls. ..... lb. .50 .55
Black haw root bark, bls. ..... lb 63 65
Black haw tree bark, bls. lb 45 50

Black Pigments

Black pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs. c.l., works ton 115.00 —
bgs., l.c.l., works ..... ton. 125.00 - —
bgs., l.c.l., New York whse ton. 169.00 - —
Blood, dried, 16-16½% ammonia New York unit-ton. 6.50 - —
high-grade, unground 16-17% ammonia, bgs. Chicago unit-ton. 8.00 - —
Blood, dried, soluble, bgs. c.l lb .13 .14
bgs., t.l. ..... lb. .15 - .17
bgs., l.t.l. ..... lb. .15½- .35½
Bloodroot, bls ..... lb .48 .50

Blue Pigments

Blue pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

From Thompsonville to Tasmania, our commerce in botanicals takes us to the least-traveled places at home and overseas.

Wherever botanicals grow, our local representatives and expeditions work with native labor to improve harvesting and curing — and to maintain continuing supply. We have established plantations abroad to assure dependable sources of the more important crops. At home our Meadow Springs Drug Farm has pioneered the scientific cultivation of such vital botanicals as digitalis and belladonna.

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PENICK

Manufacturers of Fine Chemicals and Drugs

Blue Dyes—Caffeine

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms. lb. 2.80 - 3.75
Peruvian, dms. lb. 2.10 - 2.40
BON acid maroons, pure, bbls lb. 1.75 - —
Resinated, bbls lb. 1.50 - —
Bone black, dms., l.c.l., frt. alld. lb. .18 - .22¾
Pacific coast bone black prices 2c. per lb. higher.
Bonemeal, steamed, works, E ton.65.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic)
Borax, tech., anhyd., 99½%, bgs., c.l., works ton.67.50 - —
bgs., ton lots, ex whse. New York or Chicago ton.143.75 - —
bgs., smaller lots, same basis. ton.148.75 - —
bulk, c.l., works ton.78.50 - —
gran., decahydrate, 99½%, bgs., c.l. works ton.47.50 - —
bgs., ton lots, ex whse New York or Chicago ton.103.75 - —
bgs., smaller lots, same basis. ton.108.75 - —
bulk, c.l., works ton.41.00 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton.63.00 - —
bgs., ton lots, ex whse New York or Chicago ton.119.25 - —
bgs., smaller lots, same basis. ton.124.25 - —
bulk, c.l., works ton.56.50 - —

Borax, tech., powd., 99½%, bgs., c.l., works ton.52.50 - —
bgs., ton lots, ex whse New York or Chicago ton.108.75 - —
bgs., smaller lots, same basis. ton.113.75 - —
USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt. bgs., l.c.l., same basis lb. .19 - .26
Boric acid, tech., anhyd., 99.9%, bgs., c.l., works ton.335.00 - —
bgs., ton lots, ex whse, New York or Chicago ton.390.00 - —
bgs., smaller lots, same basis. ton.415.00 - —
cryst., 99.9%, bgs., c.l., works. ton.133.50 - —
bgs., ton lots, ex whse New York or Chicago ton.190.75 - —
bgs., smaller lots, same basis. ton.195.75 - —
dms., c.l., works ton.158.00 -178.00
dms., ton lots, ex whse New York or Chicago ton.215.25 -235.25
dms., smaller lots, same basis. ton.220.25 -240.25
gran., 99.9%, bgs., c.l., works. ton.108.50 - —
bgs., ton lots, ex whse. New York or Chicago ton.165.75 - —
bgs., smaller lots, same basis ton.170.75 - —
dms., c.l., works ton.133.00 -153.00

Boric acid, tech., gran., 99.9%, dms., ton lots, ex whse New York or Chicago ton.190.25 -210.25
dms., smaller lots, same basis ton.195.25 -215.25
bulk, c.l., works ton.102.50 - —
powd., 99.9%, bgs., c.l., works ton.113.50 - —
bgs., ton lots, ex whse New York or Chicago ton.170.75 - —
bgs., smaller lots, same basis. ton.175.75 - —
dms., c.l., works ton.138.00 -158.00
dms., ton lots, ex whse New York or Chicago ton.195.25 -215.25
dms., smaller lots, same basis. ton.200.25 -220.25
USP boric acid $25 per ton higher.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 - —
100-lb. cyls., works lb. 1.70 - —
Boron trifluoride gas, cyls, truckload, works lb. .62 - —
cyls., l.t.l., works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls lb. 1.76 - —
Bromine, purif., cs. c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l. dlvd. E. of Rockies lb. .31 - —
ret. dms., l.c.l., same basis lb. .31 - .34
tanks, same basis lb. .22½ - —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —

Bromoform, pharmaceutical grade, 100-lb. cbys lb 1.80 - 1.90
Bromstyrol, bots lb. 5.45 - 5.70
Brucine, cns., 100-oz. lots oz. .50 Nom.
Brucine sulfate, NF, cns., 100-oz. lots oz. .50 Nom.
Buchu leaves, bls lb. 1.20 - —

Brown Pigments

Brown pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l., refy lb. .22 - —
tanks, contract, refy. lb. .14½ - .15
Butane, indust., tanks, group 3 gal. .04 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½ - —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18 - —
tanks, same basis lb. .14½ - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed, frt. alld. E. lb. .57½ - —
dms., l.t.l., same basis lb. .58½ - —
tanks, same basis lb. .55 - —
Prices of n-butyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .14½ - —
Syn., dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
Butyl alcohol, sec-synthetic, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16 - —
tanks, dlvd. lb. .12½ - —
tert-Synthetic, dms., c.l., frt. alld. dlvd. E lb. .14¾ - —
dms., l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ - —
dms., l.c.l., works lb. .38¼ - —
n-Butyl ether, dms., c.l., works lb. .35¼ - —
dms., l.c.l., works lb. .36 - —
tanks, works lb .33¼ - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms lb 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt alld. E. of Mississippi lb. .27¼ - .27½
dms., l.c.l., same basis lb. .28¼ - —
Butylamine (see Mono-, Di- and Tributylamine).
6-tert-Butyl-m-cresol, dms., c.l., works lb. .53 - —
dms., l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works. lb. .27½ - —
bgs., l.c.l., works lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19¼ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 5.45 - —
Light shade, bbls., same basis lb. 4.55 - —
Medium shade, bbls., same basis. lb. 5.20 - —
Medium light shade, bbls., same basis lb. 4.80 - —
Orange-red shade, bbls., same basis lb. 4.20 - —
Cadmium CP yellow, all shades, bbls., frt. alld. E. of Rockies. lb. 2.75 - —
Cadmium iodide, 25-lb. fib. dms lb 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd. lb. 1.55 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld. E. of Rockies lb. 1.61 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.91 - —
light shade, bbls., same basis lb. 1.68 - —
Medium shade, bbls., same basis. lb. 1.83 - —
Medium light shade, bbls., same basis lb. 1.76 - —
Cadmium-mercury lithopone red, maroon shade, bbls., same basis lb. 1.99 - —
Cadmium-selenide lithopone, maroon, bbls., frt. alld. E. of Rockies. lb. 2.72 - —
Maroon, dark shade, bbls., same basis lb. 2.77 - —
Orange, bbls., same basis lb. 1.54 - —
Calmium-selenide, lithopone, red, orange-red shade, bbls., same basis lb. 1.62 - —
Red, light shade, bbls., same basis. lb. 1.84 - —
Red, medium-light shade, bbls., same basis lb. 1.96 - —
Red, medium shade, bbls., same basis lb. 2.19 - —
Red, dark shade, bbls., same basis. lb. 2.52 - —
Cadmium-selenide lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.15 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more. lb. 2.50 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 2.33 - —
USP, syn., cryst., anhyd., dms., 100-lb. lots or more lb. 2.50 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 2.33 - —

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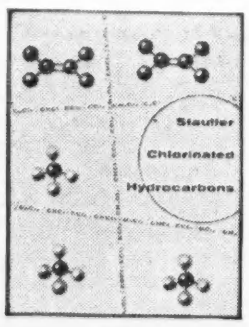

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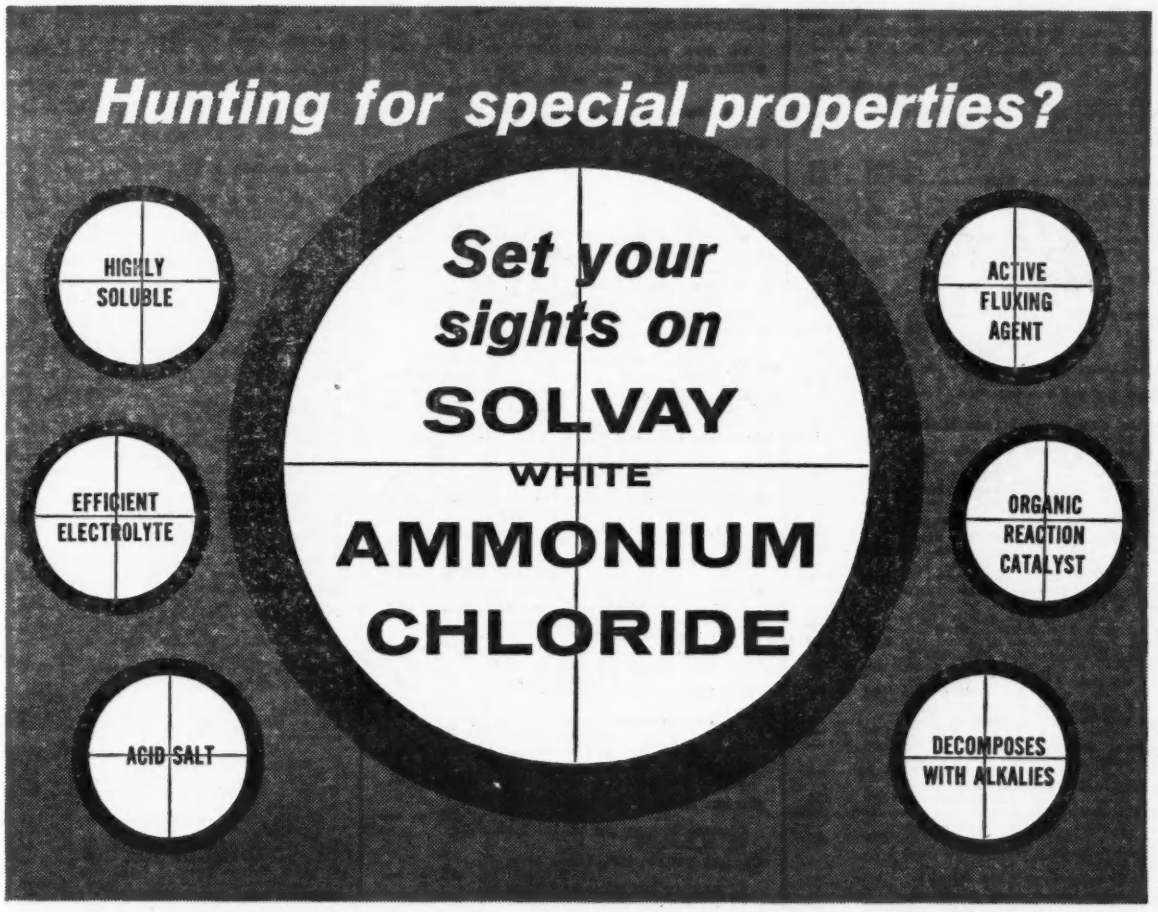
Cajuput oil, native, cns..... lb. 1.75 - 3.30
Redist., USP, cns..... lb. 1.90 - 2.10
Calamine, USP, dms..... lb. .34 - —
Calamus oil, bots..... lb. 12.00 - 20.00
Calciferol, cryst., 10-kilo or more lots, works gram. .54 - —
1-10 kilo lots..... gram. .55 - —
Calciferol in edible oil (see Viosterol)
Calcium p-aminosalicylate trihydrate 6b dms 100 lbs. or more frt adjusted lb 4.00 —
Calcium arsenate dealers bgs. c.l. frt alld lb .09 09½
bgs. l.c.l. same basis lb .10 10½
Calcium bromide NF 100 lbs or more lb .97 —
Calcium carbide standard generator size, 600-lb dms c.l. dlvd ton 149.00 —
Calcium carbonate nat. dry grd. air floated 325 mesh bgs. c.l. works ton 10.50 —
chalk whiting 325 mesh bgs. c.l. works ton 32.00 - 34.00
water-grd. ½ to 10 microns bgs. c.l. works ton 30.00 -
10 to 20 microns bgs. c.l. works ton 17.00 - 18.00
Calcium carbonate precip. dense bgs c.l. works ton 32.50 —
bgs. l.c.l. works ton 42.50 —
medium, bgs c.l. works ton 38.00 —
bgs. l.c.l. works ton 48.00 —
surface treated bgs., c.l., works. ton 37.50 —
bgs. l.c.l. works ton 47.50 —
ultrafine bgs. c.l. works ton 110.00 160.00
bgs l.c.l. works ton 120.00 175.00
Calcium chloride flake 77-80% paper bgs. c.l. works frt equald ton 31.00 —
Conc., flake or pellet, 94-97%, paper bgs., c.l., works frt. equald ton. 37.80 - —
powd., paper bgs., c.l., works. ton. 37.00 - —
Gran. purit. dms. lb .27 - —
USP, dms..... lb. .32 - —
Liquor, 40% tanks frt. equald ton. 12.50 - —
Solid 73-75% dms c.l. frt equald ton 29.50 —
dms. l.c.l. works frt equald ton 36.00 - 73.00
Calcium chromate bgs. frt equald lb 29½ .30
Calcium cyanide dms. c.l. dlvd E. of Rockies lb .20 —
dms. l.c.l. same basis lb .24 .55
Calcium cyclamate 100-lb dms lb 2.95 —
Calcium gluconate AA dms lb. .76 - —
USP, dms..... lb. .67 - .69
Calcium hydride lump dms. works lb 2.20 3.00
Calcium hypochlorite high test, 45 lb cs. dlvd E. of Rockies cs 22.95 - 25.10
100-lb dms. same basis dm 30.80 - 34.50
Calcium hypophosphite, dms. 1,000 lb lots lb 1.28 —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF dms. 10,000-lb lots or more works lb .36 40
smaller lots works lb. .41 48
Calcium mandelate USP dms., works lb 2.10 2.25
Calcium naphthenate liq 4% Ca., dms., frt. equald lb. .30 - —
Calcium pantothenate dms., frt. adjusted kilo. 35.00 - —
Calcium para aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenosulfonate, dms. lb. .99 - 1.00
Calcium phosphate dibasic, USP, bgs c.l. frt equald 100 lbs. 8.25 - —
bgs., l.c.l., frt. equald 100 lbs. 9.00 - —
feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton. 83.25 - —
bgs., c.l., t.l., f.o.b. Texas City works ton. 77.70 - —
bgs., l.c.l., frt. equald ton. 93.25 - —
21% P., bgs., c.l., t.l., frt. equald ton. 94.50 - —
bgs., l.c.l., frt. equald ton. 104.50 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices.
Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.95 - —
Calcium phosphate, tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs. 10.00 - —
Calcium phytate bgs works lb .50 - —
Calcium resinate precip. dms. ton lots, frt. alld., works lb. .36¼ - —
Calcium silicate hydrated, bgs c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½ - —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum)
Calomel, NF X, powd., 100-lb. dms. lb. 5.42 - —
Camphene 46° m.p. dms incl., c.l., works lb. .13 - —
dms incl., l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene, chlorinated 67-69% (see Toxaphene).
Camphor, monobromated NF, dms., bgs lb 3.68 - 3.70
Camphor, nat., USP, powd., cs., 100-lb. lots lb. .60 - .65
tablets, 1-oz., ½-oz cs lb. .85 - .90
USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
Syn., USP, gran., powd., bbls., 1,000-lb. lots... lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots lb. .85 - —
ctns., 500-lb lots lb. .86 - —
ctns. smaller lots lb. .87 - —
tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy, dms.... lb. .26 - .50
White, dms..... lb. .29 - .50
Cananga oil, native, cns lb. 7.60 - 7.85
Rectified cns lb. 9.55 - 12.65
Candelilla wax, crude, bgs lb. .53 - .54
Refd., bgs. lb. .60 - .62
Powdered Candelilla wax, 20 to 100 mesh, 8c. higher.
Cantharides, Chinese, cs..... lb. 2.00 2.05
powd., bxs..... lb. 2.25 2.30
Russian, bgs. lb. 2.75 - —
powd., bxs. lb. 3.00 - 3.25
Capric acid, CP, dms..... lb. .27 - .29
tanks lb. .25 - —
Caprylic alcohol, 85% dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½ - —
tanks, frt. equald lb. .16½ - —
Sec., 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb .19½ - —
Caprylic acid, dms. lb. .27 - .29
tanks lb. .25 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - 4.75
NF, from African pepper, dms. lb. 4.50 - 5.25
Caraway seed, Dutch, bgs..... lb. .09¼ - —
Polish, bgs. lb. .08½ - —

Carbazole, 97% bbls. ton lots, works lb 1.05 - —
Carbon black channel rubber beads, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs., l.c.l., works lb. .14½ - —
Furnace, fast extruding, bgs., c.l., works lb. .06¾ - —
ctns., l.c.l., whse. lb. .12½ - —
high abrasion bulk c.l. works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs., l.c.l., dlvd. or whse lb. .13½ - —
high modulus, bgs., c.l., works, lb. .06¼ - —
ctns., l.c.l., whse. lb. 12 - —
semi-reinforcing bgs. c.l. works lb. .05¾ - —
bgs. ctns. l.c.l. whse. lb. .11½ - —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color uncompressed, bgs. c.l., works lb. .13½ - —
bgs., l.c.l., dlvd or whse lb. .21 - —
Carbon dioxide indust. wholesale, bulk dlvd Metropolitan area ton 73.00 115.00
cyls. works lb .08 .09
Solid wholesale works lb .035 .040
Carbon disulfide 55 gal dms. c.l., works frt equald to competitive points lb .07 —
55-gal dms c.l. same basis lb .08½ .09
5-gal dms 30 dms to c.l. same basis lb .13 —
5-gal dms. less than 30 dms. same basis lb .16 —
tanks dlvd lb .0545 —
Carbon tetrachloride CP consumers dms. c.l. frt alld lb 12¾ —
t.c.l. frt alld lb 15¼ —

Carbon tetrachloride, tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾ - —
dms. c.c.l. c.t.l. frt. alld lb. .14¼ - —
tanks frt alld lb. 10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms. 100-lb lots, works lb 4.00 4.25
dms. smaller lots, works lb 4.10 4.75
Cardamom oil, NF bots. lb. 45.00 - 48.00
Cardamom seed, bleached, "A,". lb. 2.95 - —
Bleached, "B" lb. 2.80 - —
Decorticated Alleppy, cs. lb. 2.80 - —
Guatemala, cs. lb. 2.75 - —
Green, Alleppey, bgs. lb. 2.15 - —
Ceylon, bgs. lb. 2.15 - —
Carmine No. 40 NF bulk, 100-lb lots or more dlvd lb. 16.80 —
bulk smaller lots dlvd lb 16.90 - 17.30
Carnauba wax chalky, bgs., ton lots lb. .68 - .69
North country No. 2, crude, bgs., ton lots lb. .76 - .78
refd., pure, ton lots lb. .92 - .94
North country No. 3, Ceara, crude, bgs., ton lots lb. .71 - .72
Ceara, refd., pure, bgs., ton lots lb. .82 - .84
Parnahyba, crude, bgs., ton lots lb. .74 - .76
Parnahyba, refd., pure, bgs., ton lots lb. .82 - .84
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.22 - 1.24

Carnauba wax, yellow No. 1, Parnahyba, bgs., ton lots lb. 1.24 - 1.26
Powdered carnauba wax 20 to 100 mesh, 8c higher.
Carotene tech 1,350,000 A units per gram tins 5-10 kilo lots, dlvd gram. .24½ - —
Carotene tech. in carrot oil, 5,000,000 to 8,000,000 A units per lb. dms. works million units. .12 - —
USP microcrystalline in oil, 400-000 A units per gram., dms., dlvd million units. .174 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram cns kilo. 69.60 - —
Liquid in vegetable oil, 500,000 A units per gram, cns kilo. 87.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns. gram. .29 - —
Carvol, bots. g. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .35 - .36
Casein dom edible acid precip., 30 mesh, bgs., 10,000-lb. lots or more works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp. acid-precip. grd. Argentine, bgs., c.l. lb. .19 - .19¼
New Zealand, bgs., c.l. lb. .25 - —
Cashewnut shell liquid, treated dms., c.l., Newark, N. J lb. .22 —
dms. ton lots, same basis lb. .23 - —
dms., dm lots, same basis lb. .25 - —



These six properties of SOLVAY Ammonium Chloride illustrate how it can be profitably applied in diverse products and processes.

Its (1) acid activity, (2) high solubility at low temperatures and (3) strong electrolytic action make it basic in dry cell batteries. By solubilizing oxides at high temperatures, it is (4) a valuable flux for soldering and galvanizing metal. As (5) a catalyst in certain organic reactions, it aids adhesive and resin manufacturers. Its property of (6) decomposing, when combined with strong alkalies, to produce ammonia is important in alkaline cleansers.

These are but a few of the many properties and uses of SOLVAY Ammonium Chloride. Test it for yourself—mail the coupon.

Physical and Chemical Properties

MOLECULAR WEIGHT: 53.50

SOLUBILITY IN WATER: 20% at −13°C, 25% at 10°C, 30% at 33°C, 40% at 83°C. Strongly endothermic (lowers solution temperature upon dissolving). Aqueous solubility suppressed by sodium chloride. Slightly soluble in methyl and ethyl alcohol and acetone. Fair solubility in glycerine.

MELTING POINT: Sublimes.

pH OF SOLUTIONS: 25°C: 1% 5.5, 3% 5.1, 10% 5.0 (technical grade).

APPEARANCE: White crystals, practically 100% will pass through a No. 20 screen.

REACTIONS: Decomposed in solution by strong alkalies to liberate ammonia. Reacts with nitrites to form nitrogen. Reported to reduce oxides of cobalt and nickel at high temperatures. Hydroxides of nickel, zinc, cadmium and manganese reported to be more soluble in water in presence of ammonium chloride. Acid characteristics cause acceleration of set of urea-formaldehyde resins.

QUALITY: Principal impurity is sodium chloride. Very low in metallic impurities. Technical grade better than 99% NH_4Cl.

Sodium Nitrite • Potassium Carbonate • Caustic Soda • Chlorine
Calcium Chloride • Sodium Bicarbonate • Ammonium Chloride
Caustic Potash • Chloroform • Vinyl Chloride • Methylene Chloride
Para-dichlorobenzene • Methyl Chloride • Cleaning Compounds
Hydrogen Peroxide • Aluminum Chloride • Ammonium Bicarbonate
Soda Ash • Carbon Tetrachloride • Mutual Chromium Chemicals
Monochlorobenzene • Ortho-dichlorobenzene • Snowflake® Crystals

SOLVAY branch offices and dealers are located in major centers from coast to coast.

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SOLVAY PROCESS DIVISION
61 Broadway, New York 6, N. Y.

SOLVAY PROCESS DIVISION DV-5
61 Broadway, New York 6, N.Y.
Please send without cost:
☐ Test sample of SOLVAY Ammonium Chloride.
☐ Specific information requested in my attached letter.

Name_____
Position_____
Company_____
Address_____
Phone_____
City_____ Zone____ State_____

Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Padang, "A," bls. lb. .57 Nom.
"B" lb. .56 Nom.
"C" lb. .55 Nom.
Korintje "A" lb. .57 Nom.
"B" lb. .56 Nom.
"C" lb. .55 Nom.
Cassia oil (see Cinnamon leaf oil, USP).
Castor beans, bgs., f.o.b. Brazil ton.95.00 -110.00
Castor oil, dom., blown, dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
dehydrated, bodied, dms., c.l. lb. .2750- —
dms., l.c.l. lb. .2910- —
tanks lb. .2600- —
unbodied, dms., c.l. lb. .2660- —
dms., l.c.l. lb. .2760- —
tanks lb. .2460- —
hydrogenated, bgs., ton lots lb. .3125- —
bgs., l.c.l., dlvd. lb. .33.50- —
No. 1, dom., dms., c.l. lb. .2300- —
dms., l.c.l. lb. .2400- —
tanks lb. .20½- —
No. 3, tech., dms., c.l. lb. .22¼- —
dms., l.c.l. lb. .23¼- —
tanks lb. .20¼- —
Refd. and deodorized, dms., c.l. lb. .2750- —
dms., l.c.l. lb. .2850- —
USP, dms., c.l. lb. .2450- —
dms., l.c.l. lb. .2550- —
tanks lb. .2250- —
Imp., No. 1, Brazilian, tanks lb. .1600- —
Castor oil, sulfonated, 50% dms., works lb. .15 - .15¼
75%, dms., works lb. .19½- .20
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
split, dms lb. .37¼- 38¼
Castor pomace, bgs., c.l., works ton.40.00 Nom.
Castoreum, nat., cns. lb. 5.25 - —
Syn., cns lb 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. .75 - —
Caustic potash (see Potash caustic).
Caustic soda (see Soda caustic)
Cedarleaf oil, USP XIII, cns., dms. lb. 3.45 - 4.50
Cedarwood oil, cns., dms. lb. .51 - .65
Celery seed, French, bgs. lb. .29 - —
Indian, bgs. lb. .24½- —
Celery seed oil, bots. lb. 13.50 -16.00
Cellulose acetate, flake, powd., bgs., cns., 100-lb. lots or more, dlvd E lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
38% butyryl content, half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs. dlvd. E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose).
Cellulose gum, pure, high vis. bgs., 23,000-lb lots or more, works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
Cerium chloride, 48% dms., dlvd lb. .30 - —
Cerium hydrate 74% CeO, fib dms., 100-lb. lots or more lb. 1.40 - —
77%CeO, fib dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd lb 1.85 - 1.98
bgs., smaller lots, dlvd lb 2.03 - 2.23
Cetyl alcohol, extra fib cns., 500-lb. lots or more lb. .65 - .72
NF, fib cns., 140-lb. lots or more. lb. .48 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian style, bls lb. 1.50 - —
Roman, cs. lb. 3.00 - —
Chamomile oil, blue Hungarian, bots lb. 350.00 - —
Charcoal, activated, NF, fib, dms., c.l., works lb. .25 - .32
fib dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots, works. lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone, black).
Charcoal hardwood, bulk, lump, c.l., f.o.b. plant ton.55.00 - —
briquets, bulk, c.l., f.o.b. plant. ton.78.00 -80.00
5-lb. paper bgs., c.l., same basis ton.106.00 - —
10-lb. paper bgs., c.l., same basis ton.96.00 - —
bulk, lump, 25-lb. paper bgs., c.l., f.o.b. plant ton.87.00 - —
plant ton.87.00 - —
40-lb. paper bgs., c.l., same basis ton.84.00 - —
Charcoal, pinewood, gran., bgs., c.l., works, South ton.69.00 - —
bgs., l.c.l., works, South ton.74.00 -79.00
lump, bgs., c.l., works, South, ton.66.00 - —
bgs., l.c.l., works, South ton.70.00 -84.00
bulk, c.l., works, South ton.50.00 - —
bulk, t.l., works, South ton.55.00 - —
Chenopodium oil, NF cns. lb. 4.75 - 5.20
Chestnut extract, imp. solid, 60% tannin, bgs., ex dock lb. .08727- —
powd., 68% tannin, bgs., ex dock lb. .09617- —
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min. dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb 1.00 - —
jars, 500-lb. lots lb 1.03 - —
jars, 100 lb lots or less lb 1.05 - —
Chlordan, agricultural, dms., c.l., frt. alld lb. 65 - —
dms. l.c.l. 5,000 to 10,000-lb. lots, frt. alld lb. 66 - —
Clarified, dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000-10,000lb lots, frt. alld lb. .70 - —
Chlorinated paraffin, 40% dms., c.l. frt. alld lb. 16¼- —
dms. l.c.l. 10 dms or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms., l.c.l. 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps. ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works lb. 71 - —

Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l., Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt equald 100 lbs. 4.05 - —
Chlorine, liq., tanks, multiple units, 4 cars, same basis 100 lbs. 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - 5.75
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, dms., c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech., flake, 96-97% dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
4-Chloro-2-aminotoluene, fused bbls. lb. 1.45 - —
m-Chloroaniline, dms., min 10,000 lbs. or over, frt. alld lb. .84 - —
dms., less than 10,000 lbs. same basis lb. .89 - —
tanks, same basis lb. .82 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area lb. 1.03 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd. to N. Y. Metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb 1.10 - —
fib. dms., smaller lots works lb 1.25 - —
p-Chlorobenzoic acid, fib dms., 2,000-lbs. or more, works. lb. 2.23 - —
fib. dms., less than 2,000-lbs., same basis lb 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms. lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .80½- —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, comi., bots. lb. 1.50 - —
Comi., cyls. 180 lbs., frt. alld lb. .95 - —
cyls., 100 lbs., same basis lb. .97 - —
cyls., 25 lbs., same basis lb. 1.22 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher.
Choline bitartrate fib dms., frt. adjusted kilo. 2.75 - 3.00
Choline chloride, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP, dark, light medium blue content 1 to 15%, bbls., dlvd. E. of Rockies lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43
blue content 45-49%, bbls., same basis lb. .44 - .46
Reduced color, 25% lb. .19 - .20
Chrome green prices 1c. higher W. of Rockies.
Chrome orange, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome orange prices 1c. higher W. of Rockies.
Chrome yellow, CP, bbls., dlvd. E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾% dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd. New York Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44½- —
bgs., l.c.l., same basis lb. .45¼- —
Chromium trioxide NF bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
NF, yellow, broken bgs lb. .35 - .40
Cinnamic acid, refd., bots lb 2.50 - 3.50
Cinnamic alcohol, bots. lb. 1.90 - 2.20
Cinnamic aldehyde dms lb. .95 1.25
Cinnamon, Ceylon, No. 2, bgs. lb. .90 - —
Ceylon, "0000," bgs. lb. 1.06 - —
Cinnamon bud oil, bots. lb. 36.00 -70.00
Cinnamon leaf oil, crude dms lb 1.60 2.00
USP (Cassia), cns., dms lb. 8.50 -13.50
Citral, CP, bots., cns. lb. 4.05 - —
Extra, bots., cns. lb. 5.60 - —
Citric acid, USP anhyd., fine gran., bgs. dms. c.l lb. .29½- .30
bgs. dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
hydrous, fine gran., ogs., dms., c.l lb. .27½- .28
bgs., dms. 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms. smaller lots lb. .29 - .29½
Powdered citric acid ½c higher
Citronella oil, Ceylon, cns., dms lb. .65 - 1.18
Java, cns lb. 1.10 1.15
Java-type, cns. lb. .75 - .95
Citronellal, bots., dms. lb. 1.90 - 2.10
Citronellol, bots., dms lb. 2.90 - 3.40
Civet, artif., bots lb. 13.75 15.00
Nat., bots oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton. 17.50 -21.50
crushed, shed moisture, bulk, c.l., Tenn ton. 8.00 -11.00
Imp., airfloated, bgs., c.l., Atl. port net-ton. 42.00 -45.75
lump, bulk, Atl. port net-ton. 29.50 -35.75

Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia, bgs., c.l., works. ton. 10.00 -12.00
Georgia, bgs., l.c.l., works. ton. 15.50 - —
300 mesh, bgs., c.l., Georgia, works ton. 13.50 -14.50
bgs., l.c.l., ex-whse ton. 35.00 -36.00
Imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me. long-ton. 20.00 - 35.00
powd., bgs., c.l., ex dock. net-ton. 50.00 - —
bgs., l.c.l., ex whse net-ton. 60.00 -70.00
Cleve's acid, mixed, bbls. lb. 1.05 - —
Cloves, Madagascar, bgs. lb. .39 - —
Zanzibar, bgs. lb. .48 - —
Clove bud oil, USP, cns., dms. lb. 2.40 - 3.25
Clove leaf oil, crude, dms. lb. .85 - .90
CMC, crude, 96.4%, low or medium vis., bgs. or fib dms., 23,000 lbs., dlvd E., 100% basis lb. .41½- —
bgs. or fib. dms., less than 23,000 lbs., dlvd E., 100% basis lb. .43½- —
CMC, crude, 65%, low or medium vis., bgs., or fib. dms., c.l., dlvd., E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs. works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar, crude, resale for soins., dms. c.l., ex whse gal. .30½- —
dms., l.c.l., ex whse gal. .33½- —
tanks, works gal. .17 —
Refd., resale, indust., dms., c.l., ex whse gal. .30½- .35
dms., l.c.l., ex whse gal. .33½- .39
tanks, works gal. .16½ 20½
Coaltar pitch, aluminum, bulk, works ton 40.00 42.00
Carbon and indust., bulk, works ton 40.00 - —
Core, bulk, works ton. 36.50 - —
Fiber, bulk, works ton 44.00 - —
Roofing, 140-155°F., Federal Specification RP-381, Type I, tanks, works ton. 41.00 - —
Cobalt acetate 23.7% Co dms. dlvd. lb 1.10 - —
Cobalt blue, genuine, 250 lb. bbls., dlvd. E. of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co, powd., bgs., dlvd lb. 1.57 - —
Cobalt chloride, 24.2% Co, dms., dlvd lb 1.05 - —
Cobalt hydrate, 60-61% Co, dms., dlvd lb 2.20 - —
Cobalt linoleate, fused 8½% Co, dms lb. .71½- —
Liq., 6% Co, dms lb. .57½- —
Cobalt metal, 97-99%, kgs., ex whse. lb 2.00 - —
Cobalt naphthenate liq., 6% Co, dms., dlvd lb. .48¾- —
Cobalt nitrate 20.1% Co bbls. dlvd. lb. .85 - —
Cobalt oxide, black, 72½-73½% Co, kgs lb 1.52 - —
70-71% Co, kgs lb 1.48 - —
Cobalt phosphate powd. 32.1% Co, kgs., dlvd lb. 1.43 - —
Cobalt resinate, fused 3% Co. dms. lb. .29½- —
Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —
Cobalt sulfate, monohydrated, 33% Co, dms., dlvd lb. 1.17 - —
Cobalt tallate, 6% Co, dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz. 13.75 - —
Cocillana bark, bls. lb. .22 - —
Cocoa butter, bgs. lb. .99 - 1.04
Coconut oil, crude, tanks, New York lb. .15½- —
tanks, Pac. coast lb. .14½- —
Refd., deodorized, dms., l.c.l. lb. .24 - —
Coconut oil acids, dist., dms lb. .22½- .25
tanks lb. .20 - —
double dist. (stripped), dms. lb. .23½- .26
tanks lb. .21 —
Cod oil, Newfoundland, dms lb. .10¼- .10½
Codeine, NF cns. 100-oz lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. gal. 1.45 - 1.50
Cohosh root, black, bls. lb. .20 - .22
Blue, bls. lb. .20 .22
Colchicine, USP, bots., cns. oz. 29.00 -35.50
Colchicum root, bls. lb. .35 - —
Colchicum seed, bgs. lb. .55 - —
Collodion, USP, dms. lb. .32½- —
Flexible, dms lb. .34 - —
Colocynth pulp, bls lb. .72 - —
Colombo root, bls lb. .15 - .16
Condurango bark, bls lb. .26 - —
Congo copal gum, No. 1, bgs. lb. .25 - .26
No. 2, bgs. lb. .22 - .24
No. 3, bgs. lb. 15¾- .17
Copaiba balsam, cns., dms lb. .50 - .90
Copaiba oil, cns. lb 1.75 - 2.50
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3100- —
bgs., l.c.l., works lb. .3250- —
Copper chloride, cupric, anhyd., dms., works lb. .41 - .41½
Cryst., dihydrate, dms., works, lb. .27½- .28
Cryst., dried, dms., works lb. .35¾- .36¼
Copper chloride, cuprous, dms., works lb. .3575- .3875
Copper cyanide, tech. dms. 20,000-lb. lots or more lb. .634 - —
dms., 1,000-lb. lots or more lb. .644 - —
dms., smaller lots lb. .664 - .684
Copper gluconate, dms. lb. 3.20 - —
Copper hydrate, dms., c.l., frt. alld, E. of Miss. lb. .47¼- —
dms., l.c.l., same basis lb. .47¾- —
Copper metal, electrolytic dlvd. Valley basis lb. .25 - —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .28½- .30½
Copper oleate, solid, 9% Cu, dms., works lb. 45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .41¼- —
Copper oxide, red 97% USN Type I, bbls., 100-5,000-lb. lots, lb. .41¼- —
90% USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .39¼- —

Copper oxychloride, dms., c.l., works lb. .52 - —
dms., l.c.l., works lb. .53½- .63¼
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms. lb. 1.14 - 1.15
Copper resinate, precip., dms., frt. alld lb. .36½- —
Copper sulfate, CP, gran., dms., works lb. .1770- —
Cryst., 99%, bgs., c.l., works, 100 lbs. 10.70 - —
bgs., l.c.l., same basis 100 lbs. 11.20 -13.70
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs. 20.65 - —
dms., l.c.l., works 100 lbs. 21.40 - —
Copper sulfate, tribasic, distributors, bgs., c.l., same basis 100 lbs. 24.40 - —
bgs., l.c.l., same basis 100 lbs. 25.40 -28.40
Copper, undecylenate dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. ton. 194.00 Nom.
Pac. ports, c.i.f ton. 189.00 Nom.
Coriander oil, USP, bots. lb. 9.25 -12.50
Coriander seed, Moroccan, bgs lb. .09 - —
Rumanian, bgs. lb. .07 - —
Yugoslavian bgs lb 08½ - —
Corn oil, crude, tanks, works lb. .14 - —
Foots (soapstock) acid 95%, tanks, New York lb. .05½- —
Refd., salad, dms. lb. .1973- .2000
tanks lb. .1773- —
Corn oil acids, dist., dms lb. .17¼ .20
tanks lb. .14¾- —
Corn starch (see Starch, corn).
Corn sugar, tanners, chipped paper bgs. c.l. 60,000 lbs min. 100 lbs. 7.33 - —
paper bgs., l.c.l. 100 lbs. 7.58 - —
Corn syrup 42° Be non-ret. dms. c.l. 100 lbs 7.31 - —
non-ret. dms. l.c.l. 100 lbs 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate USP bulk gram 3.50 3.55
Costus oil, bots oz 6.00 —
Cottonseed meal, 41%, bgs., Memphis ton. 61.00 - —
Cottonseed oil, crude, tanks, South, East lb. .14 Nom.
tanks, Valley lb. .13¾- —
tanks, Texas, Lubbock lb. .13 - —
tanks, Texas, Waco lb. .13¼- —
Foots (soapstock) acid 95%, tanks, New York lb. .04 - —
Refd., salad, dms. lb. .19½- .19¾
tanks lb. .17½- —
Cottonseed oil acids dist., dms lb. .16¾- .19¼
tanks lb. .14¼- —
Cottonseed pitch, raw, dms., works. lb. .03 - .03¼
tanks, same basis lb. 02¾- —
Coumarin, NF, cryst., dms lb. 3.60 3.70
Cramp bark, NF, bls lb 85 .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, chys., lb. 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
crude, soln 80% tanks, works, gal. .226 —
refd., dms., c.l., works gal. .42 - .44
dms. l.c.l. same basis gal. .53 - .55
tanks same basis gal. .33 - .35
Creosote oil (see Creosote coaltar).
Creosote, wood, beechwood, chys., dms lb. 1.60 1.65
Hardwood, NF, bots, chys lb 1.30 —
Pinewood, dms., incl., c.l., works. lb. .0561- —
dms incl. l.c.l., works lb. .0634- —
dms incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
non-ret dms. l.c.l. same basis lb. .17½- —
tanks, same basis lb. .145 —
Cresol, USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret dms. l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-Cresol, 95-98% dms., c.l., works. lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .16 - —
m-p-Cresol, 2.97% 2°C., dms., c.l., frt. equald lb. .22 - —
dms., l.c.l. same basis lb. .23 - —
tanks, same basis lb. .20 - —
o-Cresol 30.5°C. m.p and over, ret. dms., c.l., frt. equald lb. .17 - —
ret. dms. l.c.l., same basis lb. .18 - —
tanks same basis lb. .15 - —
30°-30.49°C., m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks same basis lb. .14½- —
29°-29.9°C., m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .14 - —
25-28.9°C., m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Cresol, 98% dms. c.l. dlvd lb. .52 - —
dms., l.c.l. dlvd lb. .53 - —
tanks, dlvd lb .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald. gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same basis gal. 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald gal. 1.00 - —
Cresylic acid, coaltar, imported, meta-para content, 25% or less, f.o.b., works, frt. equald to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms. gal. 1.05 - 1.15
tanks, same basis gal. 1.00 - —
Crotonaldehyde, 91-93% dms., l.c.l., works lb. .24¼ .25
Crotonic acid, fib dms., 200 lbs or more, works lb. .51 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs 13.00 - —
bgs., l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .27 - —
Cubeb berries, XX, NF, bgs lb. .90 - —
Powd., cs lb .95 —
Cubeb oil, cns. lb. 12.00 -15.00
Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
Cumin oil, bots., cns lb. 7.50 -12.50

Cumin seed, Iranian, bgs.....lb. .24 - —
Moroccan, bgs. .....lb. No prices.
Turkish, bgs .....lb. No prices.
Cutch extract, 55% tannin, bgs., ex dock lb. .07½- —
Cyanamide, fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract ton.57.00 - —
pulv., 21% N, bgs., works unit-ton. 2.85 - —
indust., grade, bgs., c.l., works.ton.75.00 - —
bgs., l.c.l. works ton 96.00 - —
Cyanamide, indust. grade, 6-16 mesh, dms., c.l., works .ton.120.00 - —
dms., l.c.l., works.....ton.140.00 - —
Cyanoacetic acid, tech. bbls lb .90 1.25
Cyclohexane 99% tech dms., c.l., dlvd. E. of Rockies...gal. 1.02 - —
dms., l.c.l., same basis ...gal. 1.10 - —
tanks, works gal .55 - —
carload, dlvd. W. of Rockies. gal. .77 - —
l.c.l., same basis.....gal. .85 - —
Cyclohexanol tech., dms., c.l., works, frt. alld., E lb. .26½- —
dms., l.c.l., works same basis.lb. .27½- —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb. 32½- —
dms., l.c.l., works .....lb. .35 - —
tanks, works .....lb. .29 - —
Cyclohexylamine dms., c.l., works. lb. .49 - —
dms., l.c.l., works .....lb. 50 - —
tanks, works .....lb 47 - —
Cyclopropane CP, 2-lb. cyls., works, cyl.48.00 - —
6-oz cyls., works cyl.12.00 - —
Cyclopropane USP, hospitals, cyls., 40-gal. lots gal. .42 - —
cyls., 100-gal. lots.....gal. .41 - —
cyls., 200-gal. lots.....gal. .40 - —
Cypress oil, bbls .....lb 5.30 —

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2,4-D, tech., bgs., dms., c.l., works, frt. equald..lb. .40 - —
bgs. dms. l.c.l. same basis lb .45 - .49
2,4-D butyl ester dms. c.l. works lb. .43 - —
dms. l.c.l. same basis .....lb. 48 - .52
tanks, same basis lb. .42 - —
2,4-D isopropyl ester, dms., c.l., works lb. .43 - —
dms., l.c.l. works .....lb. .48 - .52
tanks, works .....lb. .42 - —
Dammar gum Batavia, A/E cs lb No stocks.
dust, bgs .....lb. No stocks.
E, bgs .....lb. No stocks.
East India, Batu, bold, bgs ..lb. .13¾ .15
nubs and chips, bgs .....lb. 08¼ .09½
black, bold, bgs. .....lb. .14½- .16½
unscraped bgs .....lb. .13 .14½
nubs and chips, bgs.....lb. .12¼ .13½
pale, chips, bgs. .....lb. .13 - .15
nubs bgs .....lb 17¾ 20
Siam, cs. .....lb. .34 - .35
Singapore, No. 1, bgs .....lb. .40 - .41
No. 2, bgs .....lb. .31¼ .34
No 3, bgs. .....lb No stocks
dust, bgs. .....lb .17 19
seeds, bgs .....lb No stocks
Dandelion root, bls .....lb. .28 —
DDD tech. flake grd. bb. dms., c.l., works lb. .45 - .47
fib. dms. l.c.l. works ..lb. .46 - .48
DDT, flake or lump bgs., c.l., dlvd .lb. .22 - —
bgs., smaller lots, same basis. lb. .24 - —
fib. dms., c.l., same basis ..lb. .23 - —
fib. dms., smaller lots, same basis. lb. .25 - —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
dms., l.c.l., dlvd .....lb. .43 - —
tanks, dlvd .....lb. 38½- —
Decyl alcohol mixed isomers, dms., c.l., dlvd lb. .23½- —
dms. l.c.l., dlvd .....lb. .24½- —
tanks, dlvd. .....lb. .21 — —
Perfume grade, bots .....lb. 1.75 2.00
Decyl alcohol, normal (see 1-Decanol).
Deertongue leaves bls .....lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bags., c.l., t.l., works ton.51.00 - —
17% P, paper bgs., c.l., works. ton.60.00 - —
bgs., t.l., works .....ton.60.75 - —
18% P, paper bgs., c.l. t.l. works ton.69.12 - —
Defluorinated phosphate, food grade, 19% P, paper bags, works, Houston, Tex., c.l. and t.l. per ton.69.50 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.
Degras, common, bbls .....lb. .10 - .12
Neutral, bbls. .....lb. .21 - .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E of Rockies gal. .64½- .66
dms., l.c.l., same basis .... gal. 69½- .77
tanks, dlvd., same basis... gal. .48½- .50
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol ethyl, proprietary solvent, dms., c.l., dlvd E of Rockies gal. .66 —
dms., l.c.l., same basis .. gal. .71 - .77
tanks, same basis ..... gal. .50 - —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies... gal. .65½- —
dms., l.c.l., same basis... gal. .70½- .76½
tanks, same basis ... gal. .49½- —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .64 - —
dms., l.c.l., same basis .. gal. .69 - .75
tanks, same basis ..... gal. .48 - —
SD3A, dms., c.l. dlvd. E. of Rockies gal. .63 - —
dms., l.c.l., same basis ... gal. 68 - .74
tanks, same basis ..... gal. .47 - —
SD23A, dms., l.c.l. dlvd. E. of Rockies gal. .655 - —
dms., l.c.l., same basis ... gal. .705 - .765
tanks, same basis ..... gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis... gal. 71 - .77
tanks, same basis ..... gal. .50 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
dms., l.c.l., same basis ... gal. .695 - 795
tanks, same basis ..... gal. .485 - —
SD30, dms., c.l. dlvd. E. of Rockies gal. .63 - —
dms., l.c.l., same basis... gal. .68 - .74
tanks, same basis ..... gal. .47 - —
SD35A, dms., c.l. dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis... gal. .71 - .77
tanks, same basis ..... gal. .50 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .64 - —
dms., l.c.l., same basis... gal. .69 - .75
tanks, same basis ..... gal. .48 - —
For anhyd alcohol on above formulas, prices are 7c. per gal. higher.
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tank cars is maintained.

d-Desoxyephedrine hydrochloride, bots. lb.24.00 -25.00
dl-Desoxyephedrine hydrochloride, bots lb. 6.50 - —
Dextrin, corn gum, paper bgs., c.l. 100 lbs. 9.40 - —
paper bgs., l.c.l. ....100 lbs. 9.55 - —
Dextrin, corn, canary dark, paper bgs., c.l. 100 lbs. 9.24 - —
paper bgs., l.c.l. .... 100 lbs. 9.39 - —
canary light, paper bgs., c.l. 100 lbs. 9.14 - —
paper bgs. .....100 lbs. 9.29 - —
white, paper bgs., c.l....100 lbs. 8.98 - —
paper bgs., l.c.l.....100 lbs. 9.13 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher
Dextrin, potato, imp., bgs. .....lb. .10½- .11
Dextrose, USP, dms .....lb. .19¾- —
Anhyd., dms .....lb. .20¾- —
Diacetyl, flavor grade, bots.....lb. 4.30 4.55
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works .....lb. .33 - —
tanks, works .....lb. .29½- —
Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms. l.c.l., works .....lb. .33 - —
tanks, works .....lb. .29½- —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd .....lb. .16½- —
tanks dlvd .....lb. .13 - —
Tech., dms., c.l., dlvd .....lb. .15 - —
dms., l.c.l., dlvd.....lb. .16 - —
tanks, dlvd .....lb. .12½- —
o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —
Dibenzyl sebacate, dms. c.l., works. lb. .93 - —
dms., l.c.l., same basis.....lb. .94 - —
tanks, same basis.....lb. .91 - —

p-Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —
Dibutyl fumarate, dms., c.l., t.l., frt. alld. lb. .33 - —
dms., l.c.l., l.t.l., frt. alld.....lb. .34 - —
tanks, frt. alld.....lb. .30½- —
Dibutyl maleate, dms., c.l., t.l., frt. alld lb. .33 - —
dms., l.c.l., l.t.l., dms., frt. alld. lb. .34 - —
tanks, frt. alld.....lb. .30½- —
Dibutyl phthalate, dms., c.l., dlvd E. lb. .32½- —
dms., l.c.l., same basis.....lb. .33½- —
tanks, same basis .....lb. .30 - —
Dibutyl sebacate, dms., c.l., works. lb. .67½- —
dms., l.c.l., works.....lb. .68½- —
tanks, works .....lb. .65½- —
Dibutyl tartrate dms., works, frt. alld lb. .65½- —
Dibutylamine, dms. c.l., dlvd lb. .55½- —
dms., l.c.l., same basis .....lb. .56½- —
tanks same basis .....lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd lb. 1.20 - —
dms., l.t.l., dlvd. .....lb. 1.24 - —
Feed grade, to vitamin premix distributors dms. c.l., t.l., dlvd lb. 1.05 - —
dms., l.c.l. same basis .....lb. 1.07 - —
2,6-Di-tert-butyl-p-cresol, tech., dms., c.l., dlvd lb. .91 - —
dms., l.c.l., dlvd .....lb. .95 - —
tanks, dlvd. .....lb. .86 - —

Dicapryl phthalate, dms., c.l., dlvd. dms., l.c.l., dlvd. .....lb. .31 .32
tanks, dlvd .....lb. 32 .33
Dicapryl sebacate, dms., c.l., works. lb. 27½ —
dms., l.c.l., works .....lb. 63 —
tanks, works .....lb. 63½ .64
Dichlorophenoxyacetic acid (see 2,4-D) lb. 61 —
2,5-Dichloroaniline, dms., works lb .83 —
o-Dichlorobenzene, dms. c.l., frt. alld. E lb. .12¾ -
dms., l.c.l., same basis .....lb. .13¾ -
tanks, same basis .....lb. .11 - —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld, E lb. .12 - —
dms., 2,000 lbs. or more, same basis lb. .14½- —
1,4-Dichlorobutane, dms. c.l. or t.l., works lb 33½ -
dms., l.c.l., or t.l.t., works lb 34 -
tanks, works lb 32 - —
Dichlorodiphenyltrichlorothane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd E lb. 15½ —
dms., l.c.l., l.t.l., same basis...lb. .16½- —
tanks, same basis lb. .13 - —
Dichloropentanes dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works .....lb. 06 - —
tanks, works .....lb. 03 - —
Dicyclohexylamine dms., c.l., works. lb. .54 - —
dms. l.c.l., works .....lb. .55 - —
tanks, works .....lb. .52 - —

PFIZER CITRIC & TARTARIC ACIDS

● With Pfizer Citric or Tartaric Acid you can develop a household cleaning product that gets metals "clean as a whistle"—safely!

The MILD ACTION of citric and tartaric acids in your cleaning preparations effectively removes tarnish and oxides from fine silver, copper and copper alloys. Citric acid is also notably successful in solving the difficult problem of formulating an aluminum cleaner that is both safe and efficient. The mild acidity of citric acid removes oxidized coatings from aluminum surfaces with negligible attack on the virgin metal.

In addition to being safe for metals, Pfizer Citric and Tartaric Acids are NONTOXIC—an important human safety feature for your product, both in its manufacture and its use by consumers.

Pfizer offers a third nontoxic organic acid that's useful for cleaners and polishes. It is gluconic acid. Salts of gluconic acid, and of citric and tartaric acids, are available from Pfizer, too. Write Pfizer for *Technical Bulletin 61* which describes the many applications of Pfizer Organic Acids in metal cleaning, polishing and plating.

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Pfizer

Dicyclohexyl phthalate, fib dms., c.l., works, frt. alld lb. .59½- —
fib. dms., l.c.l., same basis lb. .60 - —
Didecyl phthalate dms. c.l., works. lb. .34 - —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. 31½ - —
Dieldrin dms. frt alld lb 1.80 - —
dms., l.c.l., frt. alld lb. 1.95 - —
Diethanolamine dms c.l. divd E. lb. .27 - —
dms. l.c.l. same basis lb. .28 - —
tanks same basis lb. 24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .26 - —
dms., l.c.l., frt. alld lb .27 - —
tanks, frt. alld lb. .25 - —
Diethyl barbituric acid (see Barbital)
Diethylbenzene dms. t.l. frt. alld. lb. .16½- —
dms., t.t.l. same basis lb. .18½- —
Diethyl carbonate dms. c.l., frt. alld lb. .47 - —
dms. l.c.l. same basis lb. .48 - —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., divd lb. .69½- —
dms. l.c.l divd lb. 70½- —
tanks, dlvd. lb. .67 - —
Diethyl oxalate dms. c.l. frt. alld. lb. .42 - —
dms., l.c.l. same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Diethyl phthalate dms. c.l., dlvd. lb. .31½- —
dms., l.c.l., dlvd. lb. .32½- —
tanks, dlvd lb. .29 - —

Diethyl sulfate, dms., c.l., works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethylamine dms., c.l., dlvd E lb. .52 - —
dms., l.c.l., same basis lb. .53 - —
tanks, same basis lb. .49½- —
N,N-Diethylaniline dms., c.l., frt, alld lb. .57 - —
dms., l.c.l. same basis lb .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate)
Di-2-ethylhexyl phthalate (see Dioctyl phthalate)
Diethylene glycol dms. c.l. dlvd. E lb. .17¾- —
dms. l.c.l. same basis lb. .18¾- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms. l.c.l., works lb. .52¼- —
Diethylene glycol monobutyl ether, c.l., dms., works lb. .30¾- —
dms., l.c.l., works lb. .31¾- —
tanks, dlvd. E. lb. .28¼- —
Diethylene glycol monobutyl ether acetate dms. c.l., works. lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E. lb. .28¾- —
Diethylene glycol monoethyl ether, dms. c.l., dlvd lb. .22½- —
dms., l.c.l. dlvd lb. .23½- —
tanks, dlvd. E. lb. .20 - —

Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, dlvd. E lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. lb. .21 - —
dms., l.c.l., dlvd. lb. .22 - —
tanks, dlvd. E. lb. .18½- —
Diethylenetriamine dms., c.l. dlvd. E lb. .44 - —
dms., l.c.l. dlvd. E lb. .45 - —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol USP bots., 10-kilo lots kilo 100.00 -147.50
bots. 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP dom. dms lb 1.20 —
Digitoxin, USP bots gram 4.35 4.75
Diglycol laurate dms lb. .32¾ .34
Diglycol stearate dms. ton lots lb .26 - .28
Diglycolic acid bgs. works lb. .14 - —
Dihexyl sebacate dms. c.l. works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms. works lb 1.10 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0850- .0875
Dihydrostreptomycin sulfate bulk, gram. .0850- .0875
1,2-Dihydroxy anthraquinone dms., works lb 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb 2.55 - —
tech. dms lb 1.09 - —
Di-isobutyl ketone dms. c.l. divd. lb. .17 - —
dms., l.c.l., divd lb. .18 - —
tanks, dlvd lb. .14½- —
Di-isobutyl phthalate, dms. c.l., divd E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks, same basis lb. .29 - —

Di-isobutylene, dms., c.l., divd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, divd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .30½- —
dms., l.c.l., same basis lb. .31½- —
tanks, same basis lb. .28 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine dms. c.l., divd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¼- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., divd. E. of Rockies lb. .50½- —
dms., l.c.l. same basis lb. .51½- —
tanks, same basis lb. 48 - —
Dillseed, Indian, dewhiskered, bgs. lb. .11 - —
Dillseed oil, bots lb. 2.80 - 4.25
Dillweed oil, dom., bots., dms lb. 3.00 - 4.10
Dimethyl anthranilate cns lb 4.85 5.10
Dimethyl ethanolamines, anhyd., dms. c.l. divd lb 1.225 —
d.ms., l.c.l., divd lb 1.235 —
tanks, divd lb 1.20 —
70% dms. c.l. divd. 100% basis, contained amines lb .68½ —
dms., l.c.l., divd 100% basis lb .69½- —
tanks, divd. 100% basis lb 66 —
Dimethyl hydroquinone dms lb. 2.00 2.20
Dimethyl phthalate dms. c.l., works lb. .32 - —
dms., l.c.l. works lb. .33 - —
tanks, works lb. .29½- —
Dimethyl sebacate dms. c.l., works lb. 1.31 - —
dms., l.c.l., divd lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, 55-gal. ret. dms., c.l., works lb. .15 —
55-gal ret dms., l.c.l., works lb. .16 —
10-gal ret dms., l.c.l., works lb. .16¼ —
Dimethyl sulfide dms. c.l. works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln. dms., c.l., frt. equald, 100% basis lb. .41 - —
dms. c.l. frt equald, 100% basis lb. .41½- —
tanks, frt. equald, 100% basis. lb. .31 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald 100% basis. lb. .31 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .30 - —
dms., l.c.l., frt. alld. lb. .31 - —
tanks, frt. alld. lb. .28 - —
N,N-Dimethylformamide, dms., works lb. .34 .39
tanks, works lb. .32 —
2,4-Dinitroaniline, dms., frt. alld lb. .80 - —
Dinitroaniline orange toner, CP, bbls., dlvd. E. of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c. higher W. of Rockies.
m-Dinitrobenzene, 85°C. dms lb. .22 - —
89° C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld E lb. .15¼- —
dms., l.c.l. frt. alld E lb. .15¾- —
tanks frt. alld E lb. .15 —
48°C., dms., c.l., frt. alld E lb. .20¼- —
dms. l.c.l. frt. alld E lb. .20¾- —
tanks, frt alld. E lb. .20 —
2,4-Dinitrophenol bbls lb. .37 —
2,4-Dinitrotoluene, oily, dms lb. .11 - —
Refd., 63°C. dms lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½- —
dms., l.c.l., works lb .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .30½- —
dms., l.c.l., frt. alld lb. .31½- —
tanks, frt .alld lb. .28 - —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
tanks, works, divd lb. .59¼- —
1,4-Dioxane, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Dipentaerythritol, bgs., l.c.l., divd. E lb. .35 - —
Dipentene dest.-dist. dms., c.l., works. gal. .59 - —
dms., l.c.l., works gal. .63 - —
dms., l.c.l., ex whse gal. .79 - —
tankcars, works gal. .42 - —
Dipentene, steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l., dlvd. New York gal. .91 - —
tanks, works, South gal. .55 - —
Dip oil (see Tar acid oil)
Diphenyl, bgs. c.l., t.l., works lb. .17¼- —
bgs., l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
Diphenyl oxide perfume grade cns. lb. .65 - .85
Diphenyl phthalate dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .33 - —
bgs., l.c.l., same basis lb. .35 - —
Refd., fused tanks, same basis lb. .30 - —
Refd. diphenylamine in dms. ½c. per lb. higher.
Diphenylguanidine bgs., dms., ton lots, frt. alld. lb. .54 - —
bgs., smaller lots, frt. alld lb. .55 - —
Diphenylhydantoin-sodium USP, dms lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17¾- —
dms., l.c.l., frt. alld lb. .18¾- —
tanks, frt. alld. lb. .15¼- —
Dipropylene glycol methyl ether, dms., c.l. divd. E lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld. lb. .69 - —
dms., smaller lots, frt. alld lb. .70 - —
Divi-divi, 45% tannin, bgs., bis., c.l., US ports, ex dock ton. 76.00 Nom.
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
Divinylbenzene, 50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms. l.c.l., works 100% basis. lb. 1.05 - —
Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald lb. .14 - —
dms., l.c.l. same basis lb. .15 - —
tanks, same basis lb. .117 - .12

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Check the list of General Chemical's dry or liquid alum producing locations at left. Chances are one is convenient and close to you. In addition to these plants, our chain of warehouses across the country makes stocks of dry aluminum sulfate readily available in every major center of commerce. Write or phone for information on how we can serve you.

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Dyes coaltar certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:

Blue, FD&C, No. 1	lb.	15.65	17.60
No. 2	lb.	15.65	17.60
Green FD&C No. 1	lb.	15.65	17.60
No. 2	lb.	19.60	22.85
No. 3	lb.	31.30	35.90
Red, FD&C No. 1, cns	lb	5.90	7.85
No. 2	lb	3.30	4.10
No. 3	lb	19.60	22.85
No. 4	lb	5.55	7.50
Violet FD&C No 1 cns	lb	15.65	17.60
Yellow FD&C No 1 cns	lb	9.15	11.05
No. 5	lb	3.30	4.10
No 6	lb	3.30	4.10

Dyes coaltar certified colors for drugs and cosmetics, 200 lb. and 1 lb lots dlvd:—

Black, D&C No 1	lb.	10.50	10.95
Brown D&C No 1	lb.	15.65	16.10
Green D&C No 5	lb	15.65	16.10
No 6	lb	15.65	16.10
No 7	lb	14.35	14.80
Orange, D&C No 3	lb	10.50	10.95
No 4	lb	19.60	20.05
No 5	lb	5.25	5.70
Red, D&C, No. 17	lb	10.50	10.95
No. 18	lb	23.55	24.00
No. 19	lb	15.00	15.45
No. 21	lb	3.10	3.60
No. 22	lb	10.50	10.95
No. 28	lb	24.20	24.65
No 33	lb	17.00	17.45
Violet D&C No 2	lb	15.65	16.10
Yellow D&C No 7	lb	10.50	10.95
No. 8	lb	10.50	10.95
No. 10	lb	13.05	13.50
No 11	lb	13.05	13.50

Dyes coaltar certified colors for drugs and cosmetics, external use, 500-lb and 1-lb lots dlvd:—

Blue, Ext. D&C, No 1, cns	lb.	15.65	16.10
Green, Ext. D&C, No. 1, cns	lb.	15.65	16.10
Red, Ext., D&C, No 1 cns	lb.	13.05	13.50
Yellow Ext. D&C No 1, cns	lb	10.50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd No

20 Chrysoidine Y dustless	lb.	.89	—
27 Fast light orange 2G	lb	1.29	—
31 Phloxine 2G	lb	1.05	—
36 Yellow 2G	lb.	1.18	—
40 Orange R extra, conc	lb	1.52	—
57 Fuchsine 6B	lb.	1.55	—
79 Scarlet 2R	lb.	1.16	—
151 Orange AD	lb.	.79	—
161 Orange	lb.	.94	—
176 Fast red A	lb	1.39	—
179 Rubine XX conc	lb	1.47	—
180 Blue F4B	lb	1.31	—
185 Brilliant scarlet 3RN, conc.	lb	1.20	—
202 Chrome blue black R, conc.	lb.	1.07	—
203 Chrome black T	lb.	.92	—
208 Fast blue SR	lb.	1.30	—
216 Chrome red B	lb.	1.09	—
234 Brown Y	lb.	1.27	—
246 Blue black, extra, conc.	lb	1.37	—
275 Milling red 3R, conc.	lb	1.91	—
289 Navy blue 2R conc	lb.	1.70	—
299 Black F conc	lb	2.19	—
304 Neutral black 2B, conc	lb.	2.61	—
326 Fast scarlet 4BNC	lb.	2.12	—
332 Bismark brown RX, conc., dustless	lb.	1.37	—
365 Brilliant yellow conc	lb.	3.11	—
382 Scarlet B	lb.	2.60	—
401 Diazo black BHD	lb.	.93	—
406 Blue 2B, extra conc	lb.	1.53	—
419 Red FC	lb.	1.45	—
420 Brown M	lb.	1.40	—
448 Red 4BX conc	lb.	1.69	—
518 Diamine sky blue FF, extra, conc	lb.	1.95	—
561 Brown B	lb.	2.89	—
581 Black EB, 200%	lb.	1.33	—
593 Green BY conc	lb.	1.02	—
596 Yellow brown K extra	lb.	1.26	—
620 Yellow 2G	lb.	1.31	—
639 Fast Yellow GG	lb.	2.32	—
640 Yellow XX	lb.	2.30	—
655 Yellow OX	lb	2.64	—
657 Malachite green V crystals	lb.	2.73	—
662 Brilliant green G	lb	3.62	—
667 Milling green 6B conc	lb.	4.78	—
671 Blue EG	lb.	1.85	—
681 Crystal violet powder	lb.	2.15	—
698 Violet 6BN powder	lb.	2.25	—
720 Brilliant blue BBG	lb.	2.44	—
729 Blue B, extra conc	lb.	3.61	—
749 Red BX	lb	4.76	—
800 Chinoline yellow ZSS	lb	2.67	—
814 Yellow NN, conc	lb.	3.67	—
841 Safranine GF extra, conc	lb.	4.11	—
860 Induline base ZM	lb.	1.07	—
865 Nigrosine J	lb.	4.76	—
922 Blue GXX	lb.	2.22	—
978 Black GXCF conc	lb.	.38	—
1034 Alizarin red SC	lb.	3.31	—
1078 Alizarin syanine green base Z	lb.	6.13	—
1085 Alizarin blue black B	lb.	3.02	—
1096 Golden orange GFD, single paste	lb.	2.58	—
1099 Dark blue BO, single paste.	lb.	2.28	—
1101 Jade green N supra, double paste	lb.	1.55	—
1106 Blue RS, double paste	lb.	3.85	—
1113 Blue, BLFD, double paste	lb.	2.92	—
1150 Olive R, Single paste dms, dlvd.	lb.	1.42	—
1151 Brown R, single paste	lb.	2.29	—
1171 Indigo synthetic, 20% paste	lb.	.31	—
1217 Orange RD, double powder.	lb.	4.60	—
p-4 Brown PG	lb.	3.00	—
p-14 Brown EB	lb.	2.16	—
p-24 Gray L	lb.	2.08	—
p-80 Diazo brilliant scarlet ROAD	lb.	3.62	—
p-202 Diazo black VJ, conc	lb.	2.48	—
p-244 Brilliant scarlet BN	lb.	1.70	—
p-313 Naphthol SWF	lb.	1.50	—

Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.

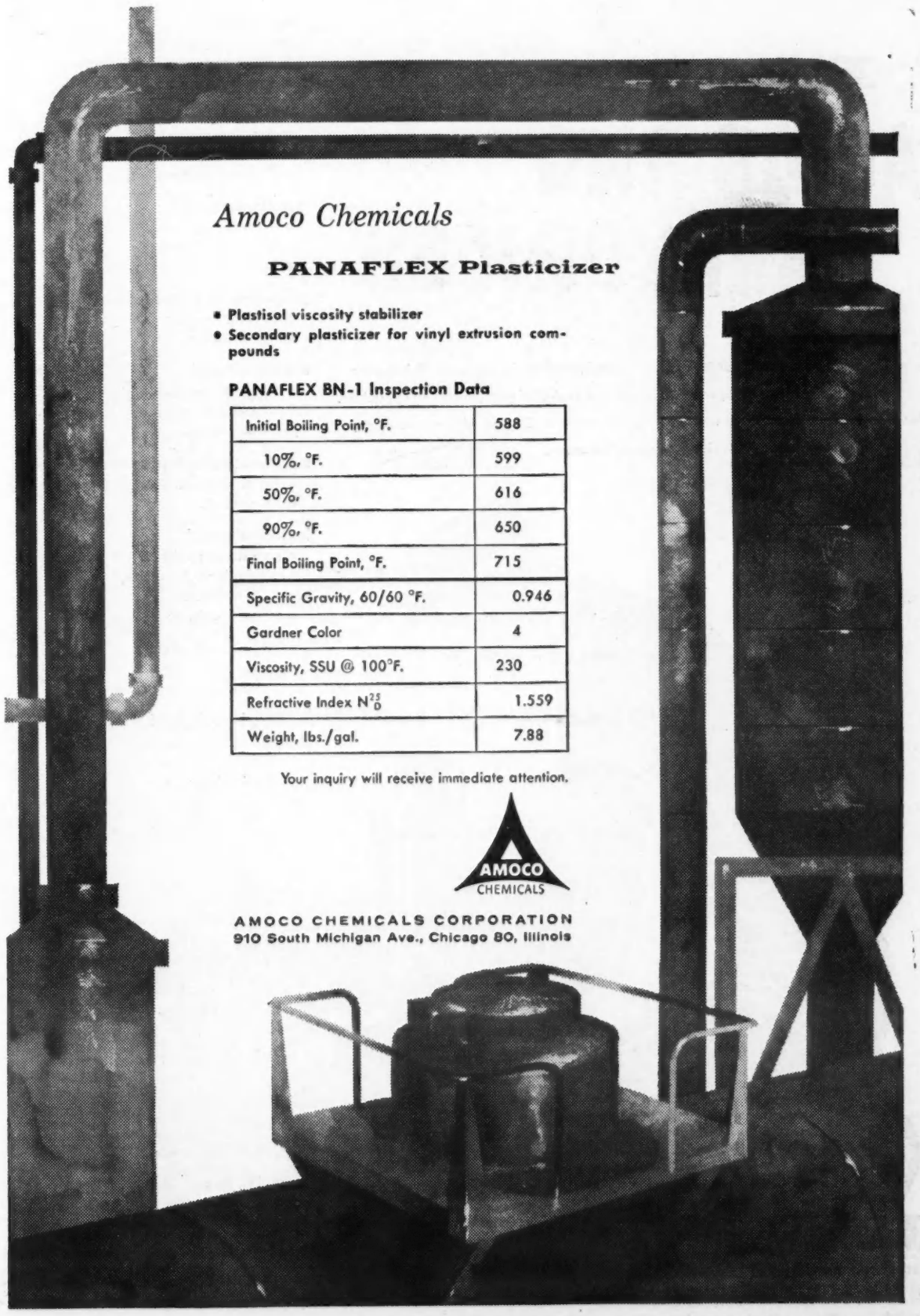
24 Oil orange Z-7078	lb.	1.06	—
73 Oil scarlet BL	lb.	1.70	—
1073 Oil violet ZIRS	lb.	6.81	—
1078 Alizarin green, CG	lb.	3.53	—
1080 Oil violet special Z	lb.	6.81	—
Oil black ZBC	lb.	4.46	—
Oil black ZBD	lb.	3.03	—
Oil black ZHH	lb.	4.61	—
Oil black ZMM	lb.	6.52	—
Oil blue ZN	lb.	8.02	—
Oil blue ZV	lb.	4.95	—
Oil orange ZMG	lb.	1.32	—
Oil red N-1700	lb.	1.76	—
Oil yellow ZG, conc	lb.	6.33	—

Dyes coaltar, spirit soluble, 100 lb. dms., dlvd. No.

p-517 Spirit yellow 2R, conc	lb.	4.62	—
p-520 Spirit orange 2R, conc	lb.	5.87	—
Spirit black RB	lb.	3.54	—
Spirit brown ZG	lb	5.30	—
Spirit red B, conc	lb	6.41	—

E

Echinacea root, bls	lb.	1.10	—
Egg albumin (see Albumin).			
Egg yolk, dried, dom., bbls.	lb.	1.31	1.33
Tanners, bbls.	lb.	.06	.06½
Elm bark, grinding bls	lb.	.30	.32
Powd., bbls., bxs.	lb.	.45	—
Select, bundles	lb.	.75	—
Emetine hydrochloride, USP, bots	oz.	43.25	49.00
Endrin, tech., dms., 100-10,000 lb. lots, dlvd., 100% basis.	lb.	3.45	—
Eosin red toner, bbls., works	lb.	1.85	—
Ephedrine, syn. USP anhyd., bots. 100-oz lots	oz.	.98	1.00
hydrous bots. 100-oz lots	oz.	.92	—
Ephedrine hydrochloride, NF, tins, 100-oz lots	oz.	.62	.72
Ephedrine sulfate USP cryst., tins, 100-oz lots	oz.	.62	.75
Powd., tins, 100-oz. lots	oz.	.62	.72
Epichlorohydrin, dms. c.l. dlvd	lb.	.35½	—
dms., l.c.l., dlvd	lb.	.36½	—
tanks, dlvd	lb.	.33	—
l-Epinephrine base syn. USP bots., 100 gram lots	gram.	.58	—
Epsom salt (see Magnesium sulfate)			
Erigeron oil, cns.	lb.	6.00	7.50
Ergot, NF, dms., tin-lined	lb.	1.60	—
Eserine salicylate, bots	oz.	72.50	84.00
Eserine sulfate, bots	oz.	87.75	—
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill. Md. Ky., Mich. Mid Atl States, N. E States Minneapolis N. C., Ohio St Louis, St. Paul Va. W. Va.	lb.	.17	—
Ester gum, wood-rosin type, dms., c.l., same basis	lb.	.17	—
Ether (see specific product)			
Ethyl acetate nat. ferment. 85-88%, dms., c.l., frt. alld	lb.	.15	—
dms., l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	12½	—
95-98%, dms., c.l., dlvd	lb.	15¼	—
dms., l.c.l., dlvd	lb.	16¼	—
tanks, dlvd.	lb.	12¾	—
99%, dms., c.l., dlvd	lb.	15½	—
dms., l.c.l., dlvd	lb.	16½	—
tanks, dlvd.	lb.	13	—
syn., 85-88%, dms. c.l. dlvd	lb.	.15	—
dms., l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	12½	—
95-98%, dms., c.l., dlvd	lb.	15¼	—
dms., l.c.l., dlvd	lb.	16¼	—
tanks, dlvd	lb.	12¾	—
99%, dms., c.l., dlvd	lb.	15½	—
dms., l.c.l., dlvd	lb.	16½	—
tanks, dlvd	lb.	.13	—
Ethyl acetoacetate dms. c.l. dlvd.	lb.	.58½	—
dms. l.c.l., dlvd	lb.	.59½	—
tanks, dlvd	lb.	.56	—
Ethyl acrylate dms. c.l. t.l. dlvd.	lb.	.36	—
dms., l.t.l., dlvd	lb.	.37	—
tanks, dlvd	lb.	.34	—
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd E of Rockies.	gal.	20.58	—
dms., l.c.l., same basis	gal.	20.63	20.69
tanks, same basis	gal.	20.42	—
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies.	gal.	.00	.00
dms., l.c.l. same basis	gal.	68	74
tanks same basis	gal.	47	—
Ethyl alcohol, absolute 200 pf. tax paid dms. dlvd E of Rockies.	gal.	21.70	—
dms., (c.l. same basis	gal.	21.75	21.81
tanks same basis	gal.	21.54	—
Ethyl alcohol, denatured (see Denatured alcohol ethyl)			
Ethyl aminobenzoate USP (see Benzocaine)			
Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20	—
dms., l.c.l. same basis	lb.	.21	—
tanks, same basis	lb.	17½	—
Ethyl benzoate bots	lb.	.90	—
Ethyl bromide tech. 98%, dms., c.l., frt. alld. E	lb.	.43	—
dms., l.c.l., frt. alld. E	lb.	.45	—
tanks, frt. alld. E	lb.	.41	—
2-Ethyl butyl alcohol, dms., c.l., dlvd works	lb.	.30	—
dms., l.c.l., works	lb.	.30¾	—
tanks, works	lb.	.28	—
Ethyl butyl ketone dms., c.l., t.l., works	lb.	.36	—
dms., l.c.l., t.l. works	lb.	.36¾	—
tanks, works	lb.	.34	—
Ethyl butyrate, works	lb.	.90	1.00
Ethyl carbamate (see Urethane)			
Ethyl cellulose, vis 7 cps., bgs., 5,000-lb lots or more, works	lb.	.70	—
bgs., smaller lots works	lb.	.72	.80


Amoco Chemicals
PANAFLEX Plasticizer
• Plastisol viscosity stabilizer
• Secondary plasticizer for vinyl extrusion compounds
PANAFLEX BN-1 Inspection Data
Initial Boiling Point, °F. 588
10%, °F. 599
50%, °F. 616
90%, °F. 650
Final Boiling Point, °F. 715
Specific Gravity, 60/60 °F. 0.946
Gardner Color 4
Viscosity, SSU @ 100°F. 230
Refractive Index N_D^{25} 1.559
Weight, lbs./gal. 7.88
Your inquiry will receive immediate attention.
AMOCO CHEMICALS
AMOCO CHEMICALS CORPORATION
910 South Michigan Ave., Chicago 80, Illinois

Ethyl Cellulose—Furfuryl Alcohol

Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .65 - .70
bgs. smaller lots works lb. .67 .81
Ethyl chloride tech. cyls. works lb .20 .22
dms., works lb. .18 .20
tanks works lb .10 —
Ethyl cinnamate, cns lb 3.35 3.50
Ethyl ethanolamines, mixed dms., c.l. dlvd E lb .43¼ —
dms., l.c.l. dlvd E lb .44½ —
tanks dlvd E lb .41½ —
Ethyl ether, anhydrous, dms. lb .27 —
Anesthesia, USP, dealers, 1-lb. cns lb 1.01 - —
½ lb cns lb 1.09 - —
¼ lb cns lb 1.21 - —
Ethyl ether, indust., dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd. E. lb. .14½- —
tanks, dlvd. E. lb. .11 - —
Ethyl gallate dms. 100 to 2,000-lb lots lb 3.90 4.40
2-Ethyl hexoic acid dms. c.l. t.l., dlvd E lb .37 - —
dms. l.c.l. t.l. dlvd E lb .38 —
tanks dlvd E lb .34½- —
(2-Ethyl hexoic acid to higher W of Rockies)
2-Ethylhexyl acrylate c.l. or t.l., straight or mixed frt. alld. E. lb. .52½- —
2-Ethylhexyl acrylate, dms., l.t.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb higher in Ariz. Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol dms. l.c. dlvd. lb. .24¼- —
dms., l.c.l. dlvd lb. .25¼- —
tanks dlvd lb. .21¼- —
Ethyl iodide chys. works lb 3.30 - —
Ethyl methacrylate dms c.l. frt. equald lb .52 - —
dms. l.t.l. frt. equald lb. .52½- —
tanks frt. equald lb. .50 - —
Ethyl morphine hydrochloride, USP. bots oz 11.85 - —
Ethyl nitrite (see Nitrous ether)
Ethyl oenanthate, dms lb. 1.20 - 1.50
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate dist. (see Tetraethyl orthosilicate).
Ethyl silicate 40% available SiO_2, dms. c.l. dlvd lb .44½- —
dms l.c.l. dlvd lb .45½- —
tanks. dlvd lb. .42 - —
N-Ethyl-a naphthylamine dms. works. lb 1.02 - —
N-Ethyl-o-toluidide, bbls lb. .88 - —
Ethylamine (see Mono, Di or Tri-).
N-Ethylaniline dms. c.l. frt alld. lb. .57 - —
dms., l.c.l. frt. alld lb. .58 - —
tanks, frt. alld. lb .55 - —
Ethylbenzene, 99% dms., c.l. or t.l., frt. equald lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
Ethylene, contract, refy gate lb. .0475- .0525
Ethylene dibromide dms., c.l., frt. equald lb. .30½- —
dms., l.c.l., frt. equald lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .12½- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb higher.
Ethylene glycol, indust. dms., c.l., dlvd E lb. .16 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd E lb. .22 - —
dms. l.c.l. dlvd E lb. .23 - —
tanks dlvd E lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd E lb. .21 - —
dms., l.c.l., dlvd E lb. .22 - —
tanks, dlvd E lb. .18½- —
Ethylene glycol monoethyl ether acetate dms. c.l. dlvd E lb. .19½- —
dms., l.c.l., dlvd E lb. .20½- —
tanks dlvd E lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd E lb. .21 - —
dms., l.c.l., dlvd E lb. .22 - —
tanks, dlvd E lb. .18½- —
Ethylene glycol monomethyl ether acetate dms. c.l. dlvd E lb. .29 - —
dms. l.c.l., dlvd E lb. .29¾- —
tanks, dlvd E lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms. lb. .33 - .38
Ethylene oxide, dms., c.l., dlvd E. lb. .21½- —
dms., l.c.l., dlvd E. lb. .24½- —
tanks, dlvd E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms. l.c.l. dlvd E. 100% basis. lb. .43 - —
tanks, dlvd E., 100% basis lb. .40 - —
Ethylvanillin 100-lb fib. dms. 500-lb lots and over lb 6.40 —
100-lb fib dms. smaller lots lb 6.65 6.95
Eucalyptol, USP, cns., dms. lb. 1.10 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms. lb. .64 - .80
NF, rectified, 80-85%, dms. lb. .71 - .95
Eugenol, USP, dms. lb 2.00 2.20
Euphorbia berb bls lb 15 17

F

F acid, crude, paste bbls. works lb 2.10 —
Feldspar, 140-200 mesh bulk, c.l. works ton 19.50 —
Feldspar in bags $3 per ton higher
Fennel oil, sweet USP cns lb 2.75 2.95
Fennel seed, Argentine, bgs. lb. .15 —
French, light, bgs. lb. .21½- —
Rumanian bgs. lb .14 —
Yugoslav, light, bgs. lb. .22½- —
Fenugreek seed, Moroccan, bgs lb. .08 - —
Ferric acetate, liq. 28° bbls., c.l., works lb. .09 —
bbls., l.c.l., works lb. .09¾- —
Soln., USP IX, chys lb. .16 —
USP IX, dms lb. .17 —
Ferric chloride anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms., l.c.l. works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
bbls., l.c.l., works 100 lbs 5.75 7.25
Ferric chloride, 42° Be. photo grade, chys., c.l., works 100 lbs. 7.25 - 8.25
42° Be., sewage grade, tanks, frt. equald, 100% basis. 100 lbs. 4.00 - —
USP, cryst. dms., works lb .07½- .09
Ferric citrate, gran., dms lb .86 - —
Ferric hypophosphite NF dms lt 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, gran., dms lb. .89 .91
Ferric oxides (see iron oxides)
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .64 - .67
Ferric pyrophosphate NF VII soluble, gran., pearls, dms. lb. .79 - —
Ferric resinate 6¾% Fe, dms., ten lots, frt. alld lb. .36½- —
Ferric stearate, dms. c.l. frt alld. lb. .39 - —
dms., l.c.l. frt alld lb. 40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton 35.25 —
bgs., l.c.l., works ton 36.25 -42.25
bulk, c.l., works ton 33.25 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 - .68
Green, pearls, USP XII, gran., dms lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb. .32½- .34½
Ferric-sodium oxalate, fine gran- dms lb. .27½- .29½
Ferrous gluconate, USP, dms. lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
Ferrous sulfate, gran., bgs., l.c.l., dlvd. Metropolitan area. 100 lbs. 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP, cryst., bbls., cns lb 09½- .10
Fir, balsam, Canada, bbls. gal. 32.00 -35.00
Oregon, bbls. gal. 3.75 - 4.00
Fir oil, Canada, cns lb. 4.80 - —
Fish oil, refd., alkali, dms. lb. .1450- .1500
Kettle-bodied, dms. lb. .1680- .1730
Light-pressed, dms lb. .1300- .1350
tanks lb. .1150- —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram, dms., 1,000,000 units. .17½- —
500,000 A units per gram, dms., 1,000,000 units. .18 - —
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton. 133.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Chesapeake Bay area ton. 128.00 -129.00
Fleaseed (see Psyllium seed)
Folic acid, USP, bots. fib. dms., kilo-lots or more gram .70 - —
10% feed grade, fib. dms., 10 kilos or more kilo. 62.00 - —
Formaldehyde, 37%, (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0645- —
tanks, dlvd. lb. .0380- —
Formaldehyde, 37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
Methanol-free (uninhibited), tanks, dlvd lb. .0350- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls. lb. .60 - .61
Fuller's earth, bgs., c.l., Ill. mines. ton 19.00 - —
calcined, bgs., c.l., same basis. ton 20.00 -21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton 17.50 - —
Fuller's earth, oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton 16.30 -17.00
200-mesh, bgs., c.l., same basis. ton 17.50 -18.00
Spent, bgs., c.l. ship. point ton 4.50 5.00
Fumaric acid, tech., bgs. dms., c.l., frt. alld. E lb. .27¼- —
bgs., l.c.l., same basis lb. .28¼- —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l., works lb. .13 - —
dms., l.c.l., works lb. .14 - —
tanks, dlvd. E. lb. .12 - —
tanks, dlvd. W. lb. .13 - —
Furfuryl alcohol, cns., works lb .29 - —
dms., c.l., Memphis, Tenn lb. .20 - —
dms., l.c.l. Memphis, Tenn lb. .21 - —
dms., c.l., Newark, N. J. lb. .21½- —
dms., l.c.l., Newark, N. J. lb. .22½- —
tanks, Memphis, Tenn. lb. .184 - —

Eastman

ACIDS AND ANHYDRIDES

Whether you buy by drum lot or tank car, you can depend on the uniformly high quality of Eastman acids and anhydrides to simplify the control of your processing operations. For more information, samples and specifications, write to Eastman Chemical Products, Inc., Chemicals Division, Kingsport, Tennessee.

acetic acid
- Organic synthesis
- Reaction medium and solvent
- Dyeing assistant

acetic anhydride
- Acetylating agent
- Dehydrating agent in nitration and sulfonation reactions, etc.

propionic acid
- Ca or Na salt used as bread mold inhibitor
- Raw material for herbicides

propionic anhydride
- Acylating agent
- Intermediate

n-butyric acid
- For the preparation of butyric esters useful in formulating perfumes and flavorings

n-butyric anhydride
- Acylating agent
- Intermediate

isobutyric acid
- As a starting point for the synthesis of plasticizers, perfume materials and lacquer solvents

isobutyric anhydride
- For the preparation of aromatic esters for perfumes

2-ethyl hexoic acid
2-ethyl isohexoic acid
- Pb, Mn and Co salts are used as oil paint driers
- Zn and Na salts are used as emulsifying and dispersing agents

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston. West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Fusel oil, refd, dms, c.l., dlvd lb .18 - —
dms., l.c.l., dlvd. lb .19 - —
tanks, dlvd. lb .15½ - —

Fustic extract, cryst, No. 1, bbls., l.c.l. lb .47½ - —
No. 2, bbls., l.c.l lb .45½ - —
No. 3, bbls., l.c.l. lb .43½ - —

Fustic extract, liq., No. 1, bbls., l.c.l., lb .22½ - —
No. 2, bbls., l.c.l. lb 21½ - —
No. 3, bbls., l.c.l. lb 19 - —
Solid, No. 1, bxs., l.c.l. lb .45 - —

G

G salt, bbls, frt. alld., 100% basis lb .73 - —
Gallic acid, NF VII, bbls, 1,000-lb. lots lb 2.00 - —
bbls, smaller lots lb 2.02 - 2.22
Gallic acid, tech., bbls., 1,000-lb. lots, lb. 1.78 - —
bbls., smaller lots lb 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb 1.50 - —
Paste, bbls, frt. alld lb 1.45 - —
Gammapicoline (see g-picoline)
Garlic oil, dom., bots. oz. 4.75 - 6.05
imp., bots. oz. 4.10 - 4.50
Gaultheria oil (see Wintergreen oil)
Gelatin, edible, pure (pork skin),
75 AOAC test, bbls., c.l. lb. .55 - —
150 AOAC test, bbls., c.l. lb. .67 - —
200 AOAC test, bbls., c.l. lb. .74 - —
225 AOAC test, bbls., c.l. lb. .77 - —
275 AOAC test, bbls., c.l. lb. .84 - —
Geisemium root, bls lb 26 - —
Gentian root, bls lb 23 - —
Grd., bbls., bxs. lb 27 - —
Powd, bbls, bxs. lb 27 - —
Geraniol, extra, cns., dms. lb. 2.50 - 3.00
Standard, cns., dms. lb. 2.20 - 3.00
Geranium oil, Algerian, cns. lb. 14.50 - 17.50
Bourbon, cns. lb. 17.00 - 19.75
Geranium oil Turkish (see Palmarosa oil)
Geranyl acetate, cns. lb. 2.20 - 2.70
Ginger oil, dist., bots. lb. 12.25 - 18.50
Ginger oleoresin NF from African root, bots lb. 5.00 - —
NF, from Jamaican root, bots. lb. 14.00 - —
Ginger root, African bls. lb. .19 - —
Cochin, bgs. lb. .14½ - —
Jamaican, No. 3, bgs. lb. .47 - —
Nigerian, split, bgs. lb. .15 - —
Glauber's salt (see Sodium sulfate)
Gluconic acid tech, 50%, dms., frt. alld lb. .18 - —
dms l.c.l. frt. alld. lb. .20½ - —
tanks, frt. alld. lb. .13½ - —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l. dlvd. lb. .15 - —
131 jellygrams, bgs., c.l., same basis lb. .17 - —
164 jellygrams, bgs., c.l., same basis lb. .17½ - —
191 jellygrams, bgs., c.l., same basis lb. .19 - —
222 jellygrams, bgs., c.l., same basis lb. .22 - —
Glue, bone, green, dry bone, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
65 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½ - —
135 jellygrams, bgs., c.l., same basis lb. .17½ - —
164 jellygrams, bgs., c.l., same basis lb. .18½ - —
180 jellygrams, bgs., c.l., same basis lb. .19½ - —
200 jellygrams, bgs., c.l., same basis lb. .20½ - —
Bone glue, l.c.l., prices 1c higher.
Glue, hide, 70-94 jellygrams, ogs., c.l., dlvd lb. .16 - —
95-121 bgs., c.l., dlvd lb. .17 - —
122-149, bgs., c.l., dlvd lb. .18½ - —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½ - —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-298, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362, bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427 bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .44 - —
Hide glue, l.c.l., prices 2c. higher.
l-Glutamic acid, 99½%, fib, dms., 100-lb. lots, frt. alld lb. 2.00 - —
fib dms., 25-lb. lots, frt. alld. lb. 2.05 - —
l-Glutamine, bots., 100 gm. lots gram. .45 - —
Glycerine, dom., crude, nat., saponification, 88%, dlvd. E., tanks lb. .17½ - —
Glycerine, nat., crude, soaplye, 80%, dlvd. E., tanks lb. .15½ - .16
Imp., nat., crude, soaplye, 80%, c.i.f. lb. .16½ - .17
Glycerine, nat., refd., USP, CP 99%, dms., c.l., dlvd lb. .29⅜ - —
dms., l.c.l., dlvd lb. .29⅞ - —
tanks, dlvd. lb. .27⅝ - —
USP, 98%, dms., c.l., dlvd lb. .28½ - —
dms., l.c.l., dlvd lb. .29 - —
tanks dlvd. lb. .26¾ - —
high gravity, dms., c.l., dlvd lb. .29¼ - —
dms., l.c.l., dlvd. lb. .29¾ - —
tanks, dlvd. lb. .27⅛ - —
Glycerine, syn, dms, c.l, dlvd lb. .29½ - —
dms., l.c.l., dlvd lb. .30 - —
tanks, dlvd. lb. .27¼ - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works lb. .20½ - —
dms., l.c.l., works lb. .21¼ - —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb 4.10 - —
Grapefruit oil, dms. lb. 2.20 - 2.75
Graphite, amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Graphite, amorph., cryst., 88-90%, powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, dlvd lb. .08¾ - .08⅞
Yellow, tanks, dlvd. lb. .07½ - —
Grease oil, No. 1, dms., c.l. lb. .15¾ - —
dms., l.c.l. lb. .16¾ - .18¾
extra winter, strained, dms., c.l. lb. .18¼ - —
dms., l.c.l. lb. .19¼ - .21¼
prime, burning, dms., c.l. lb. .19¾ - —
dms., l.c.l. lb. .20¾ - .22¾

Green Pigments

Green pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb bls lb .45 —
Guaiacol, NF, cryst, dms., tins lb 2.10 2.15
NF, liq., chys, dms lb 2.30 2.40
Guaiacol carbonate NF VII, dms. lb 3.40 3.45
Guaiacwood oil, cns lb. .85 - 1.50
Guar gum, food grade, bgs., c.l. lb. .38 - .44
5,000 lbs. or more lb. .39 - .44
Tech. grade, bgs lb. .30 - .33

Gums

Gum quotations, formerly grouped under one heading, are now listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb paper bgs., trucks, dlvd New York ton 20.30 —
Gypsum, terra alba, dom., 100-lb. paper bgs., trucks, same basis ton 20.00 - —
100-lb paper bgs., trucks, works, New York ton 17.00 - —
imp., English, 100-lb paper bgs., ex dock, New York ton 55.00 - —
100-lb. paper bgs., ex whse. ton 60.00 - 62.00

H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb. .90 - —
bbls., l.c.l., same basis lb. .95 - —
Hansa yellow, 10 G, bbls., same basis as chrome yellow, CP lb. 2.45 - —
Hansa G yellow, pigment, bbls lb. 2.20 - —
Hawthorn berries, bgs lb .21 - —
Heliotropin, 100-lb. lots, dms lb. 2.65 - 3.00
Hellebore root dom, green bls lb .70 .75
Helonias root, bls lb. 1.75 2.00
Hematine extract, cryst, No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls, l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb. .41 - —
No. 4, bbls., l.c.l lb. .39 - —
No. 5, bbls, l.c.l lb. .37 - —
Paste No. 1, bbls., l.c.l lb .20½ - —
Hemlock oil, cns. lb. 3.00 - 3.55
Hen bane leaves, bls lb. .35 .40
Heptane, indust., tanks, Bayonne, N. J gal .20 - —
tanks, Baytown, Tex gal. .16¼ - —
tanks, Borger, Tex gal. 16¼ - —
Hesperidin, purif, 25 lb lots, f.o.b., works lb 8.95 —
Hesperidin methylchalcone, bots., 50-lb lots, works lb 22.50 - —
bots., 5-lb lots, works lb 23.00 - —
bots., 1-lb lots works lb 23.50 - —
Hexachlorophene, dms lb 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York lb. .233 - —
bgs, 1,000-19,999-lb lots, same basis lb .243 —
bgs., smaller lots, same basis lb. .253 - —
fib dms, 1,000-lb lots or more, same basis lb. .250 —
fib dms, smaller lots, same basis lb .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia lb. 42½ - —
bgs, smaller lots same basis lb. 43½ - 48⅛
Hexane, indust, tanks, Bayonne, N J gal .20 —
tanks, Borger, Tex., deliv. gal. .16 - —

1952
First
Dr. Ivan W. Brown, Jr.
Duke University School of Medicine and
Rev. Basile J. Luyet
Institute of Biophysics, St. Louis University
Second
Dr. Raymond Reiser and Dr. Hermann Schlenk
Texas Agricultural Experiment Station
Third
Research team at Southern Regional Research Laboratory headed by Dr. Reuben O. Feuge

1953
First
Dr. Erich Baer
University of Toronto
Second
Dr. Lewis I. Gidez
Brookhaven National Laboratory and
Dr. Manfred L. Karnovsky
Harvard Medical School
Third
Albert C. Nuessle
Rohm & Haas and
Russell F. Crawford, Jr.
Sharon Hill, Pa.

1954
First
Prof. Robert K. Summerbell
Northwestern University and
Dr. James R. Stephens
American Cyanamid Co.
Second
Two research teams:
Dr. Robert W. Swick and Akira Kakao of Argonne National Laboratory and Dr. Harland G. Wood and Dr. Per Schambye of Western Reserve University
Third
Dr. Henry A. Sloviter
University of Pennsylvania

GLYCERINE RESEARCH AWARDS
First Award...for outstanding research accomplishment in the application of Glycerine or Glycerine derivatives
1958
GLYCERINE PRODUCERS' ASSOCIATION

1955
First
Dr. Reed A. Gray
Merck & Co.
Second
Dr. Eugene P. Kennedy
University of Chicago
Third
Dr. Karl H. Lauer
University of Alabama

1956
First
Dr. Herbert J. Dutton, U. S. Dept. of Agriculture
Second
Dr. Donald Ziversmit, University of Tennessee
Third
Dr. Stanley G. Knight, University of Wisconsin

1957
First
Dr. James L. Tullis, Harvard Medical School
Second
Guido V. Marinetti, University of Rochester
Third
C. G. Youngs and Henry R. Sallans, National Research Council of Canada

inviting nominations for the
1958 GLYCERINE RESEARCH AWARDS
FIRST AWARD . . . . $1,000 SECOND AWARD . . . $300 THIRD AWARD . . . $200

These annual awards were established in 1952 to recognize research leading to new and improved applications of glycerine and glycerine derivatives. Award winning work may deal with the chemical, physical or physiological properties of these materials; with actual or projected uses; or with scientific principles likely to stimulate future applications. Originality in extending the usefulness of glycerine into new fields will receive special consideration.

BASIS OF ENTRY—These awards are open to any individual in the United States or Canada engaged in research, either in industry or with government or educational institutions. Entries by research teams of two or three associates are eligible.

First consideration will be given to work which has come to a clear-cut point of accomplishment during the current year; but work carried on in previous years, the significance of which has been confirmed by commercial application in 1958, also will be eligible.

Entries will be judged by a committee of three persons of outstanding reputation and scientific background, having no connection with the Association or its members.

METHOD OF NOMINATION—Nominations must be made on the official entry blank, which may be obtained by writing to: Awards Committee, Glycerine Producers' Association, 295 Madison Avenue, New York 17, N. Y.

All nominations for the 1958 awards must be received by November 1, 1958 to be eligible.

Properties
HYGROSCOPICITY • STABILITY
SOLVENT POWER • VISCOSITY
NONVOLATILITY • NONTOXICITY
TASTE • COMBINING WEIGHT

ADVANTAGES THAT COME WITH... Glycerine

Applications
HUMECTANT • CARRIER
SOLVENT • LUBRICANT
SOFTENER • EMOLLIENT
ANTI-FREEZE • ALKYD BASE

GLYCERINE PRODUCERS' ASSOCIATION • 295 MADISON AVENUE, NEW YORK 17, N. Y.

1-Hexanol—Juniper Wood Oil

1-Hexanol, dms., c.l., works	lb.	.38	—
dms., l.c.l., works	lb.	.35¾	—
tanks, works	lb.	.33	—
Hexyl cinnamic aldehyde, dms.	lb.	4.00	7.50
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½	—
dms., l.c.l., works	lb.	.76	—
Hexyl salicylate, dms.	lb.	1.75	—
Hexylene glycol, dms., c.l., dlvd.	lb.	.17½	—
dms., l.c.l., dlvd	lb.	.18½	—
tanks, dlvd	lb.	.15	—
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00	—
dms., smaller lots, dlvd	lb.	14.50	—
Homatropine hydrobromide, USP, bots.	oz.	3.00	—
Homatropine methylbromide, USP, bots.	oz.	3.90	—
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago	unit-ton	6.00	—
Horehound herb, bls	lb.	.16	.19
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35	1.55
100%, ret. dms., works	lb.	1.60	1.90
Hydriodic acid, 1.50 s.g., cbys	lb.	2.92	—
1.70 s.g., cbys	lb.	3.23	—
Hydroabietyl alcohol, tecn., solid, zone 1 dms., c.l., dlvd	lb.	.29¼	—
dms., l.c.l., dlvd	lb.	.29¾	.30¼
tanks, dlvd	lb.	.27¼	—

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Hydrobromic acid medicinal, 48%, cbys. dlvd E	lb.	.37	.43
Hydrochloric acid, anhyd. (see Hydrogen chloride)			
Hydrochloric acid, 18° cbys., c.l., works 100 lbs.		2.50	—
cbys., l.c.l., dlvd Metropolitan area 100 lbs.		2.90	3.05
tanks, works, frt. equald	ton.	28.00	—
20° cbys., c.l., works 100 lbs.		2.75	—
cbys., l.c.l., dlvd Metropolitan area 100 lbs.		3.15	—
tanks, works, frt. equald	ton.	30.00	—
22° cbys., c.l., works 100 lbs.		3.25	—
cbys., l.c.l., dlvd Metropolitan area 100 lbs.		3.65	—
tanks, works, frt. equald	ton.	35.00	—
Hydrochloric acid, CP, USP consumers cbys. extra c.l. works.	lb.	.15¾	—
cbys., l.c.l., same basis	lb.	.17¼	.17¾
8-pint bots., extra cs., c.l., same basis	lb.	.20¾	—
8-pint bots., extra cs., l.c.l., same basis	lb.	.22¼	.23¼
Hydrocortisone acetate bulk bots., kilo lots or more	gram.	3.20	—
Hydrocortisone alcohol bulk bots., kilo lots or more	gram.	3.20	—
Hydrocyanic acid, cyls. c.l., dlvd.	lb.	.70	—
cyls., l.c.l., same basis	lb.	.75	.90
Hydrocyanic acid, dilute, NF, 2%, 5-lb bots	lb.	.40	—
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)			
Hydrofluoric acid, aqueous, 70%, 85-gal. dms., c.l., t.l., dlvd.	100 lbs.	19.25	—
55-gal. dms. l.c.l. t.l.l., dlvd.	100 lbs.	20.75	—
20-gal. dms., c.l., t.l., dlvd.	100 lbs.	21.00	—
20-gal. dms. l.c.l. t.l.l., dlvd.	100 lbs.	22.50	—
tanks, works frt. equald.	100 lbs.	15.50	—

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico Oregon, Washington and Wyoming In those states add $2.70 per cwt for drum delivery.

Hydrofluosilicic acid dms., works, 30% basis	lb.	.06	—
Hydrofuramide dms. fib ctns., works	lb.	.30	.40
50-lb cyls. l.c.l. works	lb.	.55	.60
Hydrogen chloride anhyd. 50-lb. cyls. l.c. works	lb.	.45	—
Hydrogen cyanide liq. 98% tanks, works	lb.	.16	—
Hydrogen fluoride, anhyd. cyls., dlvd E	lb.	.30½	.32½
cyls. dlvd W	lb.	.39	—
tanks, works	lb.	.21	—
Hydrogen peroxide USP bbls. dlvd.	lb.	.03¾	.05
35% dms., c.l. dlvd	lb.	.202	—
dms. l.c.l. dlvd	lb.	.211	—
tanks dlvd	lb	1800	—
Hydroquinone photo grade, dms	lb.	1.03	1.06
Tech. dms. c.l. dlvd	lb.	.82½	—
dms. l.c.l. dlvd	lb.	.84½	—
Hydroxyacetic acid, tech., 70%, dms. Philadelphia and Chicago.	lb.	.11	—
tanks Belle W Va	lb	.073	—
Hydroxycitronellal, cns.	lb.	4.80	5.30
Hyoscine salts (see Scopolamine)			
Hyoscyamine hydrobromide bots	oz.	6.00	7.00
Hyoscyamine sulfate bots	oz.	6.00	6.50
Hypernic extract cryst. No. 1, bbls., l.c.l.	lb.	.52	—
Liq. No 1, bbls. l.c.l.	lb.	.35	—
No 2, bbls. l.c.l	lb	.27	—
Hypophosphorous acid, purif., 50% cbys., ton lots, f.o.b. works	lb.	.85	—
NF, 30%, cbys., all quantities, same basis	lb.	.75	—

I

Ichthammol, NF, dms., jars	lb.	.70	.95
Indigo (see Dyes, cradtar 1171 indigo, syn.)			
Indol, CP bots	lb	16.00	16.25
Inositol bots, dlvd	lb	5.00	—
dms. dlvd	lb	4.50	4.75
Insect flowers (see Pyrethrum)			
Iodine, crude, kgs.	lb.	.93	—
Resub., USP, dms.	lb.	2.00	—
Iodochlorohydroxyquinolin USP dms	lb.	3.60	—
Iodoform NF dms. kgs	lb	4.90	5.00
a-Ionone, cns.	lb.	4.15	4.70
b-Ionone, cns.	lb.	4.50	4.90
Ipecac root, whole, bgs	lb.	9.50	—
Powd., bbls., bxs	lb.	10.50	—
Irish moss bleached prime bls	lb	.28	.34
Iron blue reg. bbls. c.l. dlvd E	lb	.52	—
bbls. l.c.l. ton lots, same basis	lb.	.53	—
bbls. smaller lots same basis.	lb	.54	—
Imp. British bbls. c.l., same basis	lb.	.48	—
bbls. l.c.l. ton lots same basis.	lb.	.49	—
bbls. smaller lots same basis.	lb.	.50	—
Iron blue alkali-resisting bbls. c.l., same basis	lb	.57	—
bbls. l.c.l. ton lots same basis.	lb	.58	—
bbls., smaller lots, same basis.	lb.	.59	—

Iron blue dlvd prices 1c higher for Pacific Coast states:—Wash., Ore. Cal., N M. Ariz., Mon., Wyo Utah Col. and Nev

Iron compounds (see Ferric or Ferrous)			
Iron oxide, black, pure, bgs., c.l., works	lb.	.14¾	—
bgs., l.c.l., works	lb.	.15	—
Iron oxide, brown, pure, bgs., c.l., works	lb.	.14¼	—
bgs., l.c.l., works	lb.	.14½	—
Iron oxide, metallic brown, bgs., works	lb.	.05¼	—
Iron oxide, Persian Gulf, red, bgs., c.l., works	lb.	.08¾	—
Iron oxide red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y	lb.	.14¼	—
Iron oxide, red, nat. 75-85% ferric oxide, bgs c.l., works	lb.	.06¼	—
bgs., l.c.l., works	lb.	.06½	—
Iron oxide, Spanish red, bbls., c.l., ex dock	lb.	.05¾	Nom.
bbls., l.c.l., ex dock	lb.	.06	Nom.
bbls., l.c.l., ex whse. New York	lb.	.06½	Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works	lb.	.06¼	—
Peruvian type. bgs., l.c.l	lb.	.023	.024
Iron oxide, yellow, pure, light lemon shade, bgs., c.l., works	lb.	.12¼	—
Other shades, same basis	lb.	.12	—
Isoamyl alcohol dms. c.l., works, frt. alld. E	lb.	.28	—
dms. l.c.l. same basis	lb.	.29	—
tanks same basis	lb	.25	—
Isoborneol, cns	lb	1.60	1.80
Isobornyl acetate, cns.	lb.	.51	.56
Isobornyl formate dms	lb.	1.20	—
Isobornyl proprionate, dms	lb.	1.25	1.35
Isobutyl acetate perfume grade, cns	lb.	.75	1.00
Solvent grade dms. c.l. dlvd E. of Rockies	lb.	.15¼	—
dms., l.c.l. same basis	lb.	.16¼	—
tanks, same basis	lb.	.12¾	—
Isobutyl alcohol dms. c.l., dlvd.	lb.	.16	—
dms., l.c.l., dlvd	lb.	.17	—
tanks, dlvd	lb.	.13½	—
Isobutyraldehyde, CP dms., c.l., dlvd	lb.	.27½	—
dms. l.c.l. dlvd	lb.	.28½	—
Isobutyraldehyde, tecn. dms., c.l., dlvd	lb.	.21½	—
dms., l.c.l., dlvd	lb.	.22½	—
tanks, dlvd	lb.	.19½	—
Isoeugenol, cns.	lb.	3.55	3.75
Isoniazid, powd., bulk, 25-kilo lots or more	kilo.	23.00	25.50
bulk, smaller lots	kilo.	24.00	26.00
Isonicotinic acid, 100-lb fib. dms., works	lb.	4.25	—
Isonicotinic acid hydrazide (see Isoniazid)			
Iso-octyl alcohol, dms. c.l., dlvd E.	lb.	.23½	—
dms., l.c.l., dlvd E	lb.	.24½	—
tanks, dlvd E	lb.	.21	—
Isopentane, coml. grade, tanks, f.o.b. Tex. refy	gal.	.15½	—
Isopropanol (see Isopropyl alcohol).			
Isophorone, dms., c.l. works	lb.	.24½	—
dms., l.c.l., works	lb.	.25¼	—
tanks, works	lb.	.22½	—
Isopropyl acetate, dms. c.l., dlvd.	lb.	.14	—
dms., l.c.l., same basis	lb.	.15	—
tanks, same basis	lb.	.11½	—
Isopropyl alcohol, refd., 91%, dms., c.l. dlvd	gal.	.53	—
dms., l.c.l., dlvd	gal.	.60	—
tanks, dlvd	gal.	.37	—
Refd., 95%, c.l. dms., dlvd	gal.	.55	—
dms., l.c.l., dlvd	gal.	.62	—
tanks, dlvd	gal.	.39	—
Refd., 99%, dms., c.l., dlvd	gal.	.57	—
dms., l.c.l., dlvd	gal.	.64	—
tanks, dlvd	gal.	.41	—
Isopropyl benzene (see Cumene)			
Isopropyl ether, dms., c.l., dlvd	lb.	.09½	—
dms., l.c.l., dlvd.	lb.	.10½	—
tanks, dlvd.	lb.	.07	—
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) 70% in xylol, dms., c.l., t.l., works	lb.	.70	—
dms., l.c.l. works	lb.	.714	.814
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works	lb.	.75	—
450-lb fib. dms. l.c.l. works	lb.	.80	.90
Isoquinoline dms. works	lb.	.65	1.25
Itaconic acid purif. fib dms., c.l., works	lb.	.54	—
fib. dms. l.c.l. works	lb.	.55	—
Tech. fib. dms., c.l. works	lb.	.44	—
fib. dms. l.c.l. works	lb.	.45	—

J

J acid, paste, bbls., works, 100% basis	lb	2.45	—
Powd. bbls. same basis	lb	2.50	2.85
Jalap root NF bls	lb	.90	Nom.
powd. bbls. bxs	lb	1.15	Nom.
Japan wax, cs.	lb.	.30	.31
Juniper berries bgs.	lb	.15	—
Juniper berry oil, bots.	lb.	2.90	3.75
Twice rectified bots	lb	3.60	7.00
Juniper tar NF dms	lb	.42	.60
Juniper tar oil NF (see Juniper tar)			
Juniper wood oil, tech. cns.	lb.	.38	.55

completely independent of any natural source

the new 'ROCHE' Aromatics offer the perfume designer and manufacturer :

- *previously unattainable stability in quality, supply, and price*
- *uniformity of raw materials never before achieved*
- *unexplored possibilities for creation of new interesting fragrances*
- *opportunity for long-range planning and purchasing*

Continuous olfactory control.

now available

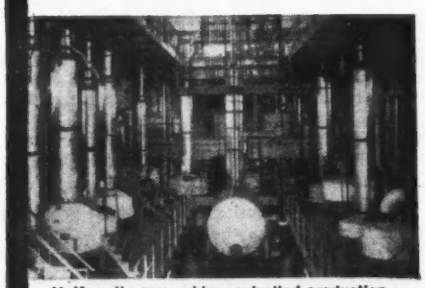
LINALOOL 'Roche'
A purer material than any previously offered to the industry. Free from the impurities present in the linalool from natural sources. Contains no other alcohols or terpenes. Olfactorily pure and floral in character. No residual 'after odor.' Unusually stable in soap.

LINALYL ACETATE 'Roche'
A very pure linalyl acetate containing no other esters and no terpenes. The Roche special process also precludes the formation of any other alcohols during the esterification process. Olfactorily pure and clean in odor. No residual 'after odor.' Unusually stable in soap.

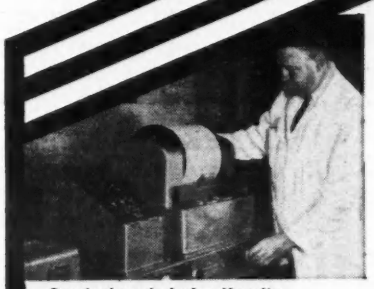
GERANYL ACETONE 'Roche'
A completely new synthetic aromatic. Possesses a soft green odor with a rose note. A good base for synthetic lavender, geranium and rose bouquet. Stable in soap.

NEROLIDOL 'Roche'
Pure nerolidol. Light balsamic odor. Excellent fixative. Blends well with any perfume compound.

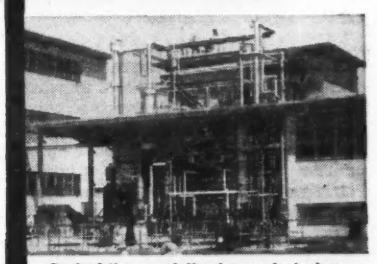
Detailed information on each product will be furnished on request.



Uniformity assured by controlled production.



Constant control of uniformity.



Part of the specialized manufacturing facilities for maintaining uniformity of 'Roche' Aromatics.

'Roche' Aromatics are available through principal essential oil distributors

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HOFFMANN-LA ROCHE INC • Roche Park • Nutley 10 • New Jersey • NUtley 2-5000
New York City: OXford 5-1400

K

Kaolin (see also Clay, China).			
Kaolin, NF, powd., fib. dms.	lb.	.10	.12
colloidal, 50-lb. bgs.	lb.	.15½-	.17½
Karaya gum No 1 NF powd., bbls.	lb.	.38	.43
No. 2, powd., bbls.	lb.	.32	.34
No. 3, powd., bbls.	lb.	.28	.30
Koch acid, bbls., frt. alld., 100% basis	lb.	1.00	—
Kola nuts, bgs.	lb.	.13	—

L

L acid, bbls., works	lb.	1.25	—
Lacquer diluent, petroleum, 150°-240° F b.r. tanks, west coast, ex tax, Los Angeles	gal.	174	—
tanks, east coast, N J, N Y,	gal.	.20	—
Benzene type, tanks group 3	gal.	.1550-	—
Toluene type tanks group 3	gal.	.1437½	—
Lactic acid, edible 50%, bbls., dms., c.l., frt. equald.	lb.	.1789-	.2740
bbls. dms. 20 or more, frt. equald.	lb.	.1839-	.2790
bbls. dms. 5 to 19 frt. qeuald.	lb.	.1889-	.2840
bbls. dms. 1 to 4 frt. qeuald.	lb.	.1938-	.2890
Lactic acid, edible, 80%, c.l., bbls., dms., frt. equald.	lb.	.3039-	.4625
bbls., dms. 20 or more, frt. equald.	lb.	.3089-	.4675
bbls. dms. 5 to 19, frt. equald.	lb.	.3139-	.4725
bbls. dms. 1 to 4, frt. equald.	lb.	.3189-	.4775
Lactic acid plastic grade 50%, c.l., bbls., works	lb.	.2740-	—
bbls., 20 or more, works	lb.	.2790-	—
bbls., 5 to 19, works	lb.	.2840-	—
bbls., 1 to 4, works	lb.	.2890-	—
80%, bbls., c.l., works	lb.	.4625-	—
bbls., 20 or more, works	lb.	.4675-	—
bbls., 5 to 19, works	lb.	.4725-	—
bbls., 1 to 4, works	lb.	.4775-	—
Lactic acid tech. 22% bbls., c.l., works	100 lbs.	6.80	—
bbls., l.c.l, works	100 lbs.	7.20	—
44%, bbls., c.l., works	100 lbs.	11.45	-12.70
bbls., l.c.l., works	100 lbs.	11.85	-13.10
USP, 85%, cbys.	lb.	.85	—
Lactose, crystalline, edible, bgs., 23,000-lb. lots, frt. equald.	lb.	.14	—
bgs. 6,000-lb lots frt. equald.	lb.	.14½-	—
bgs., 2,000-lb. lots, frt. equald.	lb.	.14¾-	—
bgs., 200-lb lots, frt. equald	lb.	.15¼-	—
Edible lactose in fib dms. ½c higher.			
Lactose, ferment. grade, bgs., c.l., works	lb.	.08½-	—
USP, fib dms. 30,000-lb. lots, frt. equald	lb.	.21½-	—
Lactose, USP, fib. dms., 2,000-lb. lots, frt. equald.	lb.	.22¼-	—
fib. dms., 200-1,800-lb. lots, frt. equald	lb.	.22¾-	—
USP lactose in bgs., ½c. to 1c. lower.			
Lactose, USP, spray dried, bgs., t.l., frt. equald.	lb.	.18½-	—
t.t.l., bgs., frt. equald	lb.	.19	.19¾
Lady's slipper root, bls	lb.	4.50	Nom.
Lake C red toner alizarine, bbls., works	lb.	1.25	—
Lamp black bgs. c.l. works	lb.	.16	.45
Lanolin, cosmetic, dms., works	lb.	.27	.29
USP, anhyd., dms., works	lb.	.24	.26
hydrous dms. works	lb.	.23	.25
Lard, cash, dms.	lb.	.1260-	—
Lard oil (see Grease oil).			
Larkspur seed bgs.	lb.	.35	—
Laurel leaf oil dms. cns.	lb.	9.75	-12.50
Laurent's acid bbls	lb.	.60	—
Lauric acid, 90% dms.	lb.	.30	.32½
tanks	lb.	.27½-	—
Lauryl alcohol, bots	lb.	2.00	2.50
n-Lauryl methacrylate, dms., c.l., t.l. works	lb.	.65½-	—
dms., t.t.l., works	lb.	.66	—
Lavandin oil, cns., dms.	lb.	1.60	2.30
Lavender flowers, medium, bls	lb.	.75	.80
Ord., bls.	lb.	.25	.40
Select, bls.	lb.	1.10	—
Lavender flower oil, USP, French, 35-37% ester, cns	lb.	3.50	5.00
38-42% ester, cns.	lb.	10.00	-12.00
Spike, Spanish, cns.	lb.	2.05	—
Lead acetate NF cryst., gran., powd	lb.	.34½-	—
White, cryst., bbls.	lb.	.25½-	—
gran., bbls.	lb.	.26½-	—
powd., bbls.	lb.	.26½-	—
Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more	lb.	.27½-	—
3-lb. bgs. or larger, l.c.l., frt. alld	lb.	.28½-	—
1-lb. bgs., c.l.	lb.	.41½-	—
1-lb. bgs., l.c.l.	lb.	.42½-	—
Lead blue, basic sulfate, bbls., c.l., shipt. point, frt. alld	lb.	.17¼-	—
bbls., l.c.l. same basis	lb.	.18¼-	—
Lead carbonate (see Lead, white, basic cabonate)			
Lead chloride, dms.	lb.	.45	—
Lead iodide NF V jars	lb.	3.82	—
Lead linoleate fused 26% Pb. dms.	lb.	.38	—
Lead metal prime pigs, New York,	lb.	.11½-	—
St. Louis	lb.	.1130-	—
Lead monosilicate bgs., c.l., works, frt. equald.	lb.	.143	—
bgs., l.c.l., same basis	lb.	.153	—
Lead naphthenate liq., 16% Pb, dms., dlvd	lb.	.19½-	—
24% Pb, dms., dlvd	lb.	.24¼-	—
Solid, 37% Pb, dms. dlvd	lb.	.31¾-	—
Lead nitrate bbls	lb.	.26¾-	—
Lead orthosilicate-gel, 50-60% PbO dms. works	lb.	.29¾-	.34¼
Lead peroxide, tech. powd., bbls.	lb.	.45	.50
Lead phthalate dibasic dms. works,	lb.	.41	—
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald.	lb.	.13¾-	—
bbls., l.c.l., same basis	lb.	.14¾-	—
97% Pb_3O_4, bbls c.l. same basis.	lb.	.1395-	—
bbls., l.c.l., same basis	lb.	.1495-	—
98% Pb_3O_4, bbls., c.l. same basis.	lb.	14.10	—
bbls., l.c.l., same basis	lb.	15.10	—
Lead resinate, precip., 23% Pb, dms., ton lots, dlvd.	lb.	.40¼-	—
Lead salicylate, normal dms. works,	lb.	.46	—
Lead silicate, (see Lead, white, basic silicate).			
Lead sulfate (see Lead, blue, basic sulfate)			
Lead tallate liq. 15% Pb, dms	lb.	.15	—
24% Pb, dms	lb.	.18½-	—
Solid, 30% Pb, dms.	lb.	.23¼-	—
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld.	lb.	.17½-	—
bgs., l.c.l., same basis	lb.	.18½-	—
Lead, white, basic silicate, bgs., c.l., shipt. pt., frt. alld.	lb.	.16	—
bgs., l.c.l., same basis	lb.	.17	—
Lead, white, basic sulfate, bgs., c.l., shipt. pt., frt. alld	lb.	.17¼-	—
bgs., l.c.l., same basis	lb.	.18¼-	—
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works,	lb.	.14	.15
non-ret. dms. t.c.l., same basis	lb.	.15	.16
unbleached, non-ret. dms., c.l., same basis	lb.	.13	.14
non-ret. dms. t.c.l., same basis	lb.	.14	.15
Lemon bioflavonoid complex, 6b. dms., 25-lb lots, works	lb	9.00	—
Lemon oil, terpeneless, bots.	lb.	22.00	-44.00
USP, Calif., cns., dms.	lb.	3.15	4.00
Messina, cns.	lb.	4.50	9.50
Lemongrass oil, cns., dms.	lb.	1.10	1.50
dl-Leucine, dms., works	lb.	12.25	-15.00
Licorice root, gran., bls.	lb.	.15	.17
Powd., bls.	lb.	.12	.15
Whole, bls.	lb.	.10	.12
Lignaloe wood oil, Mexican cns.	lb.	3.25	5.50
Lignosulfonate, 70% tannin, bgs., c.l., works	lb.	.06½	—
bgs., l.c.l., works	lb.	.06¾-	.07
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E.	ton.	14.25	—
Chemical, hydrated, bgs., c.l., same basis	ton.	17.25	—
Chemical, spray, bgs., c.l., same basis	ton.	18.25	—
For New York delivery, add $6.29 freight charge.			
Lime oil, dist., Mexican, cns.	lb.	6.25	6.80
West Indian, cns	lb.	6.25	6.75
Expressed, West Indian, cns.	lb.	8.50	-13.70
Terpeneless, dist., bots.	lb.	68.00	—
expressed	lb.	82.00	-105.00
Lime salts (see Calcium).			
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).			
Limestone grd., bgs., works	ton.	3.50	4.00
Linalool ex bois de rose oil, dms.	lb.	4.35	4.65
Ex linaloe wood oil, dms.	lb.	4.20	4.65
Syn., dms., works	lb.	4.40	—
Linalyl acetate ex bois de rose, 90-92%, dms	lb.	4.75	5.35
96-98%, dms	lb.	5.25	6.60
Ex petitgrain, bots.	lb	4.80	5.90
Syn., dms., works	lb.	4.40	—
Lindane 25% formulation dealers, dms., frt. alld	lb.	1.65	1.82
Lindane, 99% tech. formulators, dms., frt. alld	lb.	2.63	3.25
Linden flowers, with leaves, bls	lb.	.25	—
Without leaves, bls	lb.	.30	—
Linseed meal, expeller, 32% bulk, Minneapolis, mills	ton.	56.50	—
Extracted, 34% bulk, same basis.	ton.	55.00	—
Linseed oil, raw, dms. c.l., New York	lb.	.1730-	—
dms., l.c.l., New York	lb.	.1830-	—
tanks, f.o.b. Minneapolis	lb.	.1370-	—
tanks, New York	lb.	.1520-	—
tankwagon, New York	lb.	.1560-	.1580
Boiled linseed oil .006c. per lb. higher			
Linseed oil acids, dist., dms.	lb.	.2930-	—
Water-white, dms.	lb.	.2330-	—
Linseed pitch, dms.	lb.	.06	.06¾
Litharge, comi., powd., bbls., c.l., works, frt. equald.	lb.	.13¼-	—
bbls., l.c.l., same basis	lb.	.14¼-	—
Lithium benzoate dms	lb.	1.65	1.67
Lithium bromide, NF, gran., works, frt. equald	lb.	2.60	—
Lithium carbonate, NF, dms., c.l., t.l., dlvd	lb	1.29½-	—
dms. ton lots to t.l. dlvd	lb.	1.30	1.30½
Tech., dms., c.l., t.l., frt. alld.	lb.	.67	—
dms., ton lots, same basis	lb.	.73	—
dms., smaller lots, same basis.	lb.	.79	—
Lithium chloride, CP, anhyd., dms., ton lots	lb.	1.23½-	—
Lithium chloride, tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld.	lb.	.87	—
dms., l.c.l., same basis	lb.	.88	.92
Lithium citrate, NF, dms., ton lots.	lb.	1.50	—
Lithium fluoride, dms., 20,000-lb. lots, dlvd	lb.	2.15	—
bbls., ton lots and more, dlvd.	lb.	2.18½-	—
bbls., less ton lots, dlvd	lb	2.23½-	—
Lithium hydride, powd., dms., 500-lb. lots and more, works.	lb.	9.50	—
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld.	lb.	.55	—
dms., l.c.l., frt. alld	lb.	.56	—
Lithium manganite, dms., works	lb.	.95	1.05
Lithium nitrate, tech., dms., 100-lb. lots	lb.	1.15	1.23
Lithium salicylate, dms.	lb.	1.60	1.70
Lithium silicate, dms., works	lb.	1.10	1.20

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

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424 South Atchison Street, Anahiem, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Lithium stearate dms. c.l., works. lb. .47½- —
dms., ton lots, works ..... lb. .48½- —
dms., less-ton lots, works ..... lb. .53½- —
Lithium sulfate dms. 100-lb. lots, lb. 1.15 - 1.25
Lithium titanate, dms., works ... lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure bbls., works lb 1.50 - —
Resinated, bbls., works ..... lb. 1.47 - —
Lithopone ord. bgs. c.l. dlvd E. lb. .08¾- —
bgs. l.c.l., dlvd F lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l. dlvd ..... lb. .12 - —
Lobelia herb, bls. ..... lb. .50 - .65
Lobeline sulfate bots., works oz. .37.50 - 38.50
Locust bean gum, powd., bgs. lb. .38 - .39
Logwood extract, cryst. No 1, bbls., l.c.l lb. .41 - —
No 2 bbls., l.c.l. ..... lb .39 - —
Liq. No. 1, bbls., l.c.l. ..... lb .20 - —
No 2, bbls., l.c.l. ..... lb .19 - —
No 3, bbls., l.c.l. ..... lb .18½- —
Solid No 1 boxes, c.l. ..... lb 35 - —
Lycopodium cs. ..... lb. 8.00 - —
dl-Lysine monohydrochloride, fib dms lb. 12.00 - —
l-Lysine monohydrochloride, fib. dms., 10-lb. or more. lb. 12.00 - —

M

Mace, Siauw, bls ..... lb. 2.40 - —
Siauw, No. 2, whole, bls ..... lb. 2.00 - —
siftings; bls. ..... lb. 2.00 - —
Mace oil, dist., cns., dms ..... lb. 13.50 - 15.75
Magnesia calcined tech. bgs., ctns., frt. equald lb. .25¼- .26½
Tech. syn. rubber grade, light, bgs. c.l. frt equald lb. .29¾- .30½
rubber grade extra light, bgs., c.l. frt equald lb. .29¼- —
bgs., l.c.l., frt. equald. lb. .30½ —
USP, light bgs ..... lb. .36½- .37½
heavy fib. dms. ..... lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs. c.l., works, frt equald ton. 82.50 - —
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chawelah Wash ton. 46.00 - —
Magnesium bromide cs. fars lb .95 - 1.00
Magnesium carbonate, tech., bgs., c.l. frt. equald lb. .10½- —
bgs., t.l., frt. equald lb. .11 - —
bgs., l.c.l. frt equald lb. .12½- .13½
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13 - —
bgs. t.l., frt. equald lb 13½- —
bgs. l.c.l. frt equald lb 14½ 15½
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92% flake or pebble dms. c.l., works lb. .12¾ —
dms., l.c.l., works ..... lb. .14 - .15
Magnesium chloride, hydrous, 99% flake, bgs. c.l., works, ton. 55.00 - —
bgs., l.c.l., works .... ton. 65.00 - 80.00
Magnesium gluconate dms. .... lb. 1.42 - —
Magnesium hydroxide NF powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld ..... lb. .22 - —
tanks, frt. alld ..... lb. .20 - —
Magnesium metal, 99.8% ingots, 10,000-lb. lots or more, works lb. .36 - —
Pigs, 10,000-lb. lots or more, works lb. .35¼- —
Sticks, cs. works, frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. 29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium peroxide, 15%, dms., works lb. 1.00 - 1.05
Magnesium phosphate tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb. .10½- .12
Magnesium sulfate tech. bgs., c.l., works 100 lbs. 2.15 - —
bgs. l.c.l. works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works. 100 lbs. 2.35 - —
bgs. l.c.l. 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs. smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate USP fib. dms. 5,000-lb. lots lb. .38 - —
fib. dms. 1,000-lb lots ..... lb. .40 - —
fib. dms. 100-lb lots ..... lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Malachite green, straight, PTMA, bbls. works lb. 5.30 - —
Malathion, dms., c.l., works ..... lb. .89 - —
dms., l.c.l., works ..... lb. .92 - 1.01
Maleic acid, cryst., powd., dms lb. .37¼- —
Maleic anhydride dms. c.l. dlvd. E of Rockies lb. .28¾- —
dms., l.c.l., dlvd. E of Rockies lb. .29¾- —
tanks, dlvd. E. of Rockies ..... lb. .27¾- —
Prices on maleic anhydride W. of Rockies, 1½c. per lb higher.
Malic acid, tech. dms ..... lb. .50 - —
Mandelic acid NF dms. 1,000-lb. lots. lb. 2.35 - —
dms. smaller lots ..... lb 2.40 - 2.50
Mandrake root, bls. ..... lb. .55 - —
Manganese acetate, bbls., dlvd lb. .35 - —
Manganese borate, tech. fib. dms. lb. .23½- —
Manganese carbonate, bbls. works. lb. .22 - —
Manganese chloride, anhyd., dms., works lb. .25½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works ton. 148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis ton. 144.50 - —
40,000 to 99,999-lb lots, dms., same basis ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher.
Manganous gluconate dms. .... lb. 1.84 - —
Manganese hydrate, bbls. dlvd lb. .36 - —
Manganese hypophosphite, NF dms. lb 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼- —

Manganese metal, electrolytic, dms., c.l., dlvd. E ..... lb. .34 - —
dms. ton lots, dlvd. E .... lb. .36 - —
dms., smaller lots dlvd. E lb. .38 - —
Manganese naphthanate, liq., 6% Mn, dms., frt. alld. lb. .39¾- —
Manganese resinate, fused, 3½% Mn, dms. lb. .25¼- —
Precip., 6½-7% Mn. dms ..... lb. .33 - —
Manganese sulfate, fertilizer grade, 65% MnSO, bgs., c.l., dlvd S E ton. 97.50 - —
bgs. l.c.l., dlvd S.E ton. 104.50 - —
Manganese tallate 6% dms lb .24 - —
Mangrove bark, E African, 38% tannin bgs. c.l. ex dock. ton. 64.00 -65.00
South American 30% tannin, bgs., c.l., ex dock ton. 47.00 -50.00
Manila copal gum, C, bgs ..... lb. .34 - .38
CBB, bgs. ..... lb. No stocks.
DBB, bgs. ..... lb. .24 - .27
DK, bgs. ..... lb. No stocks.
DK, dust, bgs ..... lb. .14 Nom.
MA, soft, bgs. ..... lb. .17¾- .21
WS, bgs. ..... lb. No stocks.
Mannitol com'l. fib dms., ton lots, works lb. .60 —
fib dms. to ton lots, works lb. .62 —
fib dms. single dm. works lb. .65 —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Merraptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
bgs., l.c.l., works lb. .31 - —
Menadione, USP bots gram. .044 .05
Menhaden oil crude tanks, works, Atl. & Gulf. lb. .08 Nom.
Menthol, nat., USP, Brazilian, cs. lb. 5.50 Nom.
Japanese, cs. ..... lb. 7.00 - 7.15
Syn. USP racemic cns lb. 4.50 - —
2 Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs., fib dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs., fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
NF, gran. or powd., dms., 100-lb. lots or more lb. 4.78 - —
Mercuric cyanide, NF VIII powd., fib dms lb. 6.84 - —
Mercuric iodide red, NF X fib dms. lb. 7.72 - —
Mercuric oxide red NF X, powd., 50-lb. lots or more lb. 5.97 - —
Tech., 100-lb. lots or more, works, lb. 5.77 - —
Mercuric oxide yellow, bbls., tech., 1,000-lb. lots lb. 5.58 - —
bbls., smaller lots ..... lb. 5.60 - —
NF X, fib dms. ..... lb. 6.14 - —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate, USP XV)
Mercury metal, 76 lbs. per flask, net-flask. 229.00 -232.00
Mesityl oxide, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. ..... lb. .16 - —
tanks, dlvd lb .12¼- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid dms., works lb .57 75
Metanitroparatoluidine (see m-Nitro-toluidine)
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works lb. .47 - —
dms., smaller lots, works lb. .47½- .50
tanks, works lb. .45 - —
Methanol, nat. denaturing grade, tanks frt. alld gal. .89 - —
Syn. zone 1 dms., c.l., or t.l. min., frt. alld or dlvd gal. .48½- —
dms. t.c.l. works gal. .55½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35½- —
tankwagon, 4,000 gal., min., frt alld or dlvd gal. .32½- —
tankwagon, 4,000 gal. min., works, Carteret, Camden, N. J gal. .29½- —
Methanol, syn., zone 2, dms., c.l., or t.l., min. frt. alld. or dlvd. gal. .51½- —
dms. t.c.l. works gal. .58½- —
tankwagon 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .38½- —
tanks, 4,000 gal. min. frt. alld. or dlvd gal. .35½- —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine)
di-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib dms., same basis lb. 2.45 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs. frt alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis. lb. .22 - .22½
Methyl abietate hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis, lb. .24 - .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat., dms., l.c.l., E of Miss., frt alld gal. .62½- —
Syn., dms., c.l., frt. alld E .... gal. .66 - —
dms. t.c.l., frt. alld. E .... gal. .72 - —
tanks, frt. alld. E .... gal. .51 - —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont., N Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. ..... lb. .40 - —
tanks, dlvd lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., t.c.l., dlvd E ..... lb. .18 - —
tanks, dlvd E lb. 14½- —
Metatylamyl alcohol (see Methyl isohutyl carbinol).
Methylamyl ketone, dms., works lb 1.05 —
Methyl anthranilate cns lb 2.35 2.65
Methyl benzoate, cns. dms .... lb. .65 - .75

Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld. lb. .83 - .85
Methyl cellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works. lb. .83 - —
50-lb. bgs., 2,000-lb. lots and more, same basis. lb. .89 - —
50-lb. bgs., smaller lots, frt. alld on 100 lbs. lb. 1.05 - —
Methyl cellulose, standard vis. (15-400 cps.). 50-lb. bgs., c.l., frt. alld. lb. .69 - —
50-lb. bgs., 2,000 lb. lots and more, same basis lb. .76 - —
50-lb. bgs. smaller lots, frt. alld. on 100-lbs lb. .79 - .89
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit same basis. lb. .12¾- —
Refrigerator mfrs., cyls., dlvd. lb. .48¾- —
other consumers or service men, cyls., dlvd. lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns ..... lb. 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd. lb. .15 - —
dms., t.c.l., dlvd ..... lb. .16 - —
tanks, dlvd ..... lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works. lb. .43 - —
dms., t.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Methyl formate, refd., dms ..... lb. .35 - .40
Tech., non-ret. dms., any quantity works lb. .10 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works. lb. .31 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21½- —
100-lb. multiwall paper bgs., l.t.l., works ..... lb. .23 - —
Methyl heptin carbonate, bots lb. 28.00 -31.00
Methyl p-hydroxybenzoate fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 4.15 - —
Methyl isobutyl carbinol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd ..... lb. .18 - —
tanks, dlvd ..... lb. .14½- —
Methyl isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd ..... lb. .18 - —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns... lb. 3.00 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion, tech. 80%, dms., c.l., frt. alld. E. lb. 1.25 - —
dms., t.c.l., frt. alld. E .... lb. 1.30 - —
Methyl paratnion prices 2c. per lb. higher in West.
Methyl roseaniline chloride, NF, 5-lb fib dms lb. 6.90 - —
Methyl salicylate, USP cns., 500-lb. lots lb. .62½- .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies. lb. 2.80 - —
Methyl violet toner, tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib. dms., 100-lb. lots, frt adjusted lb. 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l. or t.l. works lb. .14 - —
dms., l.c.l., t.l., works .... lb. .16¾- —
tanks, 4,000-gal. min., tank trucks, maximum load limit, works lb. .12½- —
tanktrucks, 1,000-gal. min., works lb. .13½- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E. lb. .06½- —
bgs., l.c.l., ex-whse. ... lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
paint or lacquer, bgs., l.c.l., ex-whse. or freight, alld. E. lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., l.c.l., ex-whse. or frt. alld E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
white, 5-10 microns, bgs., l.c.l., ex-whse., or frt. alld. E.lb. .09 - —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works .... lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., l.c.l., same basis gal. .67 - —
tankcars, refy. ..... gal. .46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars, refy. ..... gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., l.c.l., same basis gal. .68 - —
tankcars, refy ..... gal. .47 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .69 - —
non-ret. dms., l.c.l., same basis gal. .74 - —
tankcars, refy ..... gal. .53 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .75 - —
non-ret. dms., l.c.l., same basis gal. .80 - —
tankcars, refy ..... gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis ..... gal. .77 - —
non-ret. dms., l.c.l., same basis gal. .82 - —
tankcars, refy ..... gal. .61 - —
200-210 vis., non-ret. dms., c.l., f.o.b., New York gal. .84 - —
non-ret. dms., l.c.l., same basis gal. .89 - —
tankcars, refy ..... gal. .63 - —

Mineral oil, white, USP, 300-350 vis., non-ret. dms., c.l., f.o.b. New York .. gal. .84½- —
non-ret. dms., l.c.l., same basis. gal. .89¼- —
tankcars, refy ..... gal. .63½- —
Mineral orange, American, bbls., c.l., works .. lb. .1610- —
bbls., l.c.l., same basis ..... lb. .1710- —
Mineral spirits, petroleum, odorless, tanks, refy., Watson, Calif. gal. .25 - —
tanks, Borger, Tex ..... gal. .25 - —
Houston, Tex ..... gal. .25 - —
Philadelphia ..... gal. .32 - —
Newark ..... gal. .29 - —
New York, dlvd ..... gal. .30½- —
Wood River, Ill ..... gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco gal. .169 - —
tanks, east coast, New Jersey New York gal. .18 - —
tanks, group 3 ..... gal. .12875- —
tankwagon Boston ..... gal. .20 - —
Buffalo ..... gal. .20½- —
Chicago ..... gal. .289 - —
Cleveland ..... gal. .23½- —
Newark ..... gal. .19 - —
New York ..... gal. .19 - —
Philadelphia ..... gal. .19½- —
Pittsburgh ..... gal. .19 - —
Providence ..... gal. .20½- —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses blackstrap, feed grade, tanks, New Orleans .... gal. .14 - .15
tanks, New York ..... gal. .18 - —
Molybdated orange, bbls ..... lb. .48 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, pure, dms., works lb. 1.15 - —
Tech., dms., works, basis Mo content lb. 1.39 - —
Molybdic acid, 85%, dms., works lb. 1.20 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., t.c.l., same basis ..... lb. .58½- —
tanks, same basis ..... lb. .55 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E. lb. .10½- —
dms., t.c.l., same basis ..... lb. .11½- —
tanks, same basis ..... lb. .08¾- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., t.c.l., same basis ..... lb. .28½- —
tanks, same basis ..... lb. .25 - —
Monoethylaiphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., t.c.l., dlvd. E. 100% basis. lb. .40 - —
tanks, dlvd. E. 100% basis ... lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylortholuidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., t.c.l., same basis ..... lb. .28½- —
tanks, same basis ..... lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., t.c.l., same basis ..... lb. .34½- —
tanks, same basis ..... lb. .31 - —
Monomethylamine, 30 35% soln., dms., c.l., frt. equald, 100% basis lb. .39 - —
dms., t.c.l., frt. equald, 100% basis lb. .39½- —
tanks, frt. equald, 100% basis. lb. .29 - —
40% soln., dms., frt. equald., 100% basis lb. .36 - —
dms., t.c.l., frt. equald, 100% basis lb. .36½- —
tanks, frt. equald, 100% basis. lb. .29 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .29½- —
bgs., l.c.l., dlvd. E ..... lb. .30½- —
Monopotassium glutamate, dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms. 100-lb lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., any quantity, dlvd lb. 1.07 - —
Monosodium phosphate, (see Sodium phosphate, monobasic).
Moro-tertiary-butylmetacresol (see 4-tert-Butyl-m-cresol).
Montan wax, dom., refd., bgs .. lb. .29 - .30
Imp., crude, Bohemian, bgs .. lb. .22 - .24
German, bgs. ..... lb. .26 - .27
Morphine, cns ..... oz. 12.40 -12.60
Morphine acetate, anhyd., cns ... oz 9.95 -10.00
Morphine hydrobromide, cns ... oz. 9.90 - 9.95
Morphine hydrochloride, NF, cns. oz. 9.90 - 9.95
Morphine sulfate, USP cns ... oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E ... lb. .35½- —
dms., t.c.l., dlvd E. ..... lb. .36½- —
tanks, dlvd. E ..... lb. .32¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.45 - 5.15
cns., 25-lb. lots ..... lb. 5.05 - 5.65
cns., 5-lb. lots ..... lb. 5.20 - 5.50
Ketone, fib. dms., 100-lb. lots. lb. 4.70 - 5.30
cns., 25-lb. lots ..... lb. 5.35 - —
cns., 5-lb. lots ..... lb 5.45 - —
Xylol, fib. dms., 100-lb. lots .. lb. 1.40 - —
cns., 25-lb. lots ..... lb. 1.45 - —
cns., 5-lb. lots ..... lb. 1.50 - —
Mustard seed, Danish, yellow, bgs. lb. .10¾- —
Montana, yellow, bgs ..... lb. .09 - —
Montana, No. 1, Oriental, bgs. lb. .08½- —
Mustard oil, syn. bots ..... lb. 1.60 - 1.85
Mustard seed oil, nat. dms. .... lb. .17½ Nom
Myristic acid, dms. ..... lb. .23 - .25¼
tanks ..... lb. 22¾- —
Myrobalans, Bombay ..... ton. 52.00 -53.00
J-1, genuine, bgs., ex dock .. ton. 59.00 -60.00
J-1, crushed, bgs., ex dock .. ton. 73.00 -74.00
Myrobalans, extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty .... lb. .10½- .10¾
Myrrh gum, cs. ..... lb. .50 - .55

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's, 140°F, flash, tanks, east coast, New Jersey and New York gal. .18 - —
tanks, group 3 ..... gal. .15 - .15½
tankwagon, Newark ..... gal. .19 - —
New York ..... gal. .19 - —
Philadelphia ..... gal. .19½- —
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles .... gal. .174 - —
Portland, Ore. ..... gal. .18 - —
San Francisco ..... gal. .179 - —
Seattle, Wash. ..... gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 ..... gal. .13875- —

Naphtha, VM&P, petroleum, tank-wagon, Boston..gal. .21½- —
Chicago .....gal. .299 - —
Cleveland .....gal. .24½- —
Newark .....gal. .20½- —
New York .....gal. .20½- —
Philadelphia .....gal. .21½- —
Pittsburgh .....gal. .20 - —
Naphthalene, crude, com., 74°, tanks, tanks, frt. equald. lb. .06¼- —
78°, bgs., c.l., same basis lb. .07½- .08
bgs., l.c.l., same basis lb. .07¾- .08¼
tanks, same basis..... lb. .07 - —
Imp., 78° bgs., large lots... lb. .035 - .05
Naphthalene, refd., indust., chipped, crushed, bgs., frt. equald.. lb. .12½- —
tanks, same basis lb. .11¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs. 50 lbs., c.l., same basis, lb. .15¾- —
1-lb pkgs., c.l., same basis lb. .18½- —
a-Naphthol bbls., frt. alld .... lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., l.c.l., works .. lb. .35 - —
Naphthol ITR red toner, bbls., works lb. 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid)
2-Naphthol-3,6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, bbls., frt. alld lb. .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid)
2-Naphthylamine-1-sulfonic acid (see Tobias acid)
2-Napthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
Naringin, fib dms. ... lb. 6.50 - —
Neatsfoot oil, 15° cold test, dms lb. .30 - .33
20° cold test, dms. ... lb. .29 - .32
30° cold test, dms ... lb. .28 - .31
Neocinchophen USP dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .35 - —
fib dms. 100-999-gram lots, basis activity..gram. .40 - —
Neroli oil, NF, French, bots..... lb.550.00 -575.00
Spanish bots ..... lb.70.00 - —
Nerolin, cns ..... lb. 2.55 - 2.85
Nevile and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd ..... lb. .73 - .80
Nickel carbonate, bbls., dlvd. ... lb. .80¾- .87¼
Nickel chloride, bbls., dlvd. ..... lb. .40½- .43½
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal electro cathodes, cs., works lb. .74 - —
Nickel nitrate, bbls., works..... lb. .32½- .33½
Nickel oxide, black, bbls. ..... lb. .84 - —
Green, bbls ..... lb. .85 - —
Nickel sulfate, bgs., c.l., dlvd. ..lb. .32½- —
bgs., l.c.l., dlvd. ..... lb. .33½- .40½
Nicotinamide, USP, dms., frt. adjusted kilo. 9.50 - 9.80
Nicotinamide hydrochloride, dms., frt adjusted kilo. 9.50 - 9.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
40% manufacturers, 500-lb. dms., frt. alld lb. 1.05 - —
Nicotinic acid USP, dms., dlvd. kilo 8.00 - 8.30
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs ..... lb. .10¼- —
Nikethamide, cbys. ..... lb. 5.00 - —
Nitric acid, 35° Be., cbys., c.l., works, E 100 lbs. 5.75 - —
cbys., l.c.l. works, E... 100 lbs. 6.05 - 6.35
38° Be. cbys. c.l., works, E. 100 lbs. 6.25 - —
cbys. l.c.l. works E. 100 lbs. 6.55 - 7.35
40% Be., cybs., c.l., works E. 100 lbs. 6.75 - —
cbys., l.c.l., works, E 100 lbs. 7.05 - 7.85
42° Be. cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys., l.c.l., works, E 100 lbs. 7.55 - 8.35
Nitric acid, 58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
Nitric acid, CP, NF, consumer cbys. extra, c.l., works..lb. .18½- —
carboys, extra, l.c.l., works, lb. .20 - —
5-pt. bots, extra, cs., c.l., same basis lb. .22½- —
5-lb bots., extra, cs., l.c.l., same basis lb. .24 - .25
m-Nitroaniline, cryst., dms., frt. alld lb. 1.15 - —
Paste, dms., frt alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
dms., t.t.l., frt. alld. ..... lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline dms., frt. alld.... lb. .445 - —
Nitrobenzene, dbl dist., dms., c.l., frt. alld..lb. .13 - —
dms., l.c.l., frt. alld..... lb. .14 - —
tanks, frt. alld. ..... lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works..lb. .66 - —
dms., l.c.l., works..... lb. .67 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, seconds, bbls., c.l., works..lb. .38 - —
bbls., l.c.l., same basis..... lb. .39 - .41
18-20 cps. bbls. c.l. same basis. lb. .40 - —
bbls., l.c.l., same basis.... lb. .41 - .43
Ester-soluble, 250-400, 600-1,000 seconds, bbls., l.c.l., same basis..lb. .43 - .46
Spirit-soluble, 30-35 cps., ¼, ½, seconds, bbls., c.l., same basis..lb. .43 - —
bbls., l.c.l., same basis.... lb. .44 - .46
Spirit-soluble, 5-6 cps., 40-60 seconds, bbls., c.l., same basis..lb. .42 - —
bbls., l.c.l., same basis..... lb. .43 - .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld lb. .15 - —
dms., l.c.l. same basis..... lb. .16 - —
tanks, same basis ..... lb. .13 - —
p-Nitrochlorobenzene, dms. ..... lb. .26 - .27
Nitroethane, dms., c.l., dlvd. E. lb. .24 - —
dms., l.c.l., dlvd. E..... lb. .24¼- —
tanks dlvd E. ..... lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald..unit. 1.28 - —
Nitrogenous process tankage, bulk, works..unit-ton. 3.25 - 4.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works, unit-ton. 3.19 - .50

Nitromethane, dms. c.l. dlvd. E lb. .24 - —
dms., l.c.l., dlvd. E..... lb. .24¼- —
tanks, dlvd. E. ..... lb. .22½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms, works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .51 - —
dms., l.c.l., frt. alld ..... lb. .53 - —
1-Nitropropane, dms., c.l., frt. alld. E lb. .22½- —
dms., l.c.l., same basis..... lb. .23¼- —
tanks, same basis ..... lb. .21 - —
2-Nitropropane, dms., c.l., frt. alld. E lb. .18½- —
dms., l.c.l., same basis..... lb. .19½- —
tanks, same basis ..... lb. .16 - —
Nitropropane prices west of Rockies are 1c per lb higher
o-Nitrotoluene, dms., c.l., frt. alld. lb. .13 - —
dms., l.c.l., frt. alld..... lb. .14 - —
tanks, frt. alld ..... lb. .11 - —
p-Nitrotoluene, flake or solid, tech., l.c.l., dms., works. lb. .30 - —
m-Nitro-p-toluidine, dms ..... lb. 1.43 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
Nonylphenol, dms., l.c.l., frt. alld.lb. .23 - —
dms., l.c.l., frt. alld..... lb. .23 - —
tanks, frt. alld..... lb. .19½- —
For shipments to western states add 2c. to above schedule.
Nutgalls, Aleppo, bgs ..... lb. .35 - .36
Chinese, bgs ..... lb. No prices.
Nutmeg, East Indian, bgs. ..... lb. 1.83 - —
West Indian, bgs ..... lb. 1.85 - —
Nutmeg oil, USP dist., East Indian, cns., dms..lb.12.00 -15.75
West Indian, cns., dms....lb.13.00 -15.75

Nux vomica, bls ..... lb. .10 - .12
Powd., bbls., bxs..... lb. .15 - .17

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms.....lb. .40 - .70
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger, Tex ..... gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .37 - —
dms., l.c.l., dlvd ..... lb. .39 - —
tanks, dlvd. ..... lb. .34½- —
Octyl alcohol, perfumer's grade, bots lb 1.60 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb .24 - —
bgs., l.c.l., works ..... lb .24½- —
tanks, works ..... lb. .23 - —
Octyl phenol in dms., 1lc higher.

Oils

Oil quotations, formerly grouped under one heading, are now listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms..... lb. .18 - .18½
tanks ..... lb. .16½- —
Oleic acid, dbl.-dist. (white), dms. lb. .17¾- .20¼
tanks ..... lb. .15¼- —
Single-dist., dms. ..... lb. .16½- .19
tanks ..... lb. .14 - —
Oleo oil, extra, dms. ..... lb. .19 - .19½
Oleostearine, dms. ..... lb. .15 - .15½
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb .20 Nom.
Tears, cs ..... lb 22 .30
Olibanum oil, bots ..... lb 5.50 7.65
Extra fine, bots ..... lb 8.00 9.50
Olive oil, edible, dms, spot duty paid gal. 2.45 - 2.55
Olivine, crude, works .. ton 12.00 —
20 mesh, works ..... ton 15.00 —
100 mesh, works..... ton.20.00 - —
Opium USP cns oz.19.20 19.45
gran., cns. ..... oz.21.65 -21.90
powd., cns ..... oz.21.65 -21.90
Orange oil, expressed USP, Brazilian cns., dms lb No stocks
Calif., cns., dms..... lb. 2.00 - 2.35
lb. 2.00 - 2.35
Florida, cns., dms..... lb. 1.50 - 2.30
Messina, cns lb 3.85 5.85
West Indian, cns., dms.... lb. 2.50 - 3.75
Sesquiterpeneless bots lb.65.00 -120.00
Sweet, dist., cns., dms. ..... lb. .90 - —
Orange peel, bitter Haitian bls lb .14 .16

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Orange Pigments

Orange pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns ..... lb 2.00 - —
Orris root, Florentine, bls ..... lb .55 - —
powd, bbls., bxs ..... lb .68 - —
Verona, bls ..... lb .35 - .40
powd., bbls., bxs ..... lb .44 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid. (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine)
Osage orange, cryst., No 1, bbls. l.c.l lb. .40 - —
Extract, liq., No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots ..... gram 3.00 4.00
Ouricury wax, crude, bgs ..... lb. .79 Nom.
Refd., pure, bgs ..... lb. .90 Nom.
Oxalic acid, bbls., c.l., works ..... lb. .18½ —
bbls., 10,000-lb. lots, works ..... lb. .18¾ —
bbls., smaller lots, works ..... lb. .19¾ —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 1.17
Oxyquinolin sulfate, cns 100-lb. lots, works lb 4.75 5.00
cns., smaller lots, works ..... lb. 4.92 5.17

P

Palm oil, clarif., dms. ..... lb. .14½- .15½
tanks ..... lb. .12¼- —
Palm oil acid, dist., dms. ..... lb. .15¾- .19¼
tanks ..... lb. 13¾ 14¼
Palmarosa oil, cns ..... lb. 4.25 - 6.00
Papain, African, bots ..... lb. No prices.
Ceylon, bots. ..... lb. No prices.
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 - —
cns., smaller lots ..... oz. 5.05 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 - 7.35
Paprika, Bulgarian, bgs ..... lb. .32 - —
Hungarian, bgs. ..... lb. .34 - —
Rumanian, bgs. ..... lb. .29 - —
Spanish, bgs. ..... lb. .32 - .46
Yugoslavian, bgs. ..... lb. .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Para-aminosalicylic acid (see p-Aminosalicylic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Anisidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. ..... lb. 1.21 - —
Chlorinated, kgs. ..... lb. 1.35 - —
Paraffin, crude, scale white, 123°-127°F. ASTM, tanks, refy. lb. .0710- —
fully refd., 122°-124°F, ASTM, tanks, refy. lb. .0815- —
125°-127° F. ASTM, tanks, refy. lb. .0815- —
130°-132°F, ASTM, tanks, refy. lb. .0815- —
132°-134° F., ASTM, tanks, refy. lb. .0815- —
135°-137°F, ASTM, tanks, refy. lb. .0815- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld. lb. .0955- —
bgs., l.c.l., frt. alld ..... lb. .1155- .1255
91%, powd., bgs., c.l., ex whse lb. .167 - —
bgs., l.c.l., ex whse ..... lb. .182 - —
USP X, fib. dms., c.l. ..... lb. .19 - —
fib. dms., 1,000-lb. lots ..... lb. .20 - —
fib dms., smaller lots ..... lb. .21½ - —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal dms., l.c.l., dlvd. ..... lb. .15 - —
tanks, dlvd. ..... lb. .11½ - —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl, dms. c.l., frt. alld. lb. 1.38 - —
dms., l.c.l., frt. alld. ..... lb. 1.41 - —
Parathion prices 2c. per lb. higher in West
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls. ..... lb. No stocks.
Patchouli oil, dms. ..... lb. 5.00 - 5.75
Peach kernel oil USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb., bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, 45%, old process, bgs., mills ton.64.00 -65.00
Peanut oil, crude, tanks, f.o.b. mills. lb. .18 - —
Refd., dms. ..... lb. .23¼- .23½
tanks ..... lb. .21¼- —
Pectin, dom., NF, citrus, powd., bbls. lb. 2.05 2.06
Dom. tech. powd. 150 jelly grade, rapid set, bbls lb. 1.32 - —
Slow set, bbls ..... lb. 1.35 - —
Imp., Danish, ex whse lb. 1.28 - —
Penicillin potassium, cryst., bulk, 1,000,000 units. .0675- .0700
Penicillin, procaine, bulk 1,000,000 units. .0675 -.0700
Penicillin, sodium, bulk 1,000 000 units. .0775- .0800
Pennyroyal oil, USP, imported, cns. lb. 2.30 - 2.75
Pentachlorophenol, bgs., c.l., t.l., works, frt. equald lb. .22 - —
bgs., l.c.l. same basis ..... lb. .23½- .30
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs. c.l., dlvd. lb. .29½- —
bgs., l.c.l., dlvd. ..... lb. .30½- —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust., tanks Tex refy. gal. .14 - —
Pentobarbital, dms., 100 lbs or more lb. 6.00 - —
Pepper, Malabar black, spot, bgs. lb. .25¾- —
Lampong, black, bgs ..... lb. .25¾- —
Sarawak black, bgs ..... lb. .25½- —
Red, Gondar, spot, bgs ..... lb. .26 - —
Japanese, hontaka, bgs ..... lb. .27 - —
Santaka, bgs. ..... lb. .25 - —
Pepper, red, Funtuas, bgs ..... lb. .31 - —
Sudanese, bgs ..... lb. .34 - —
Zanzibar, bgs. ..... lb. .46 - —
White, Muntok, bgs ..... lb. .39½- —
Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
imp., USP, bls. ..... lb. .85 - —
Peppermint oil, nat., dms ..... lb. 3.60 - 5.10
Redist., USP, dms ..... lb. 4.00 - 5.60
Perchloroethylene dms., c.l. or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd ..... lb. .15¼- —
tanks, dlvd ..... lb. .12¼- —
tanktruck, 1,000 gal. min., dlvd. lb. .12¾- —
Peri acid, dry, bbls., frt. alld .. lb. 1.35 - —
Paste, bbls., frt. alld ..... lb. 1.30 - —
Peru balsam, dms ..... lb. 1.33 - 1.93
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil South American, cns., dms lb. 2.50 - 2.93
Petrolatum, cream dms., c.l., refy. lb. .07¾- —
dms., l.c.l., dlvd ..... lb. .10½- —
tanks, refy ..... lb. .05½- —
Extra amber dms., c.l., refy .. lb. .06¾- —
dms., l.c.l., dlvd ..... lb. .09½- —
tanks, refy ..... lb. .04½- —
lily white, dms., c.l., refy ..... lb. .08½- —
dms., l.c.l., dlvd ..... lb. .10½- —
tanks, refy ..... lb. .05½- —
USP, snow white, dms., c.l., refy. lb. .08¾- —
dms., l.c.l., dlvd ..... lb. .11 - —
tanks, refy ..... lb. .06¾- —
Petrolatum, USP, soft yellow, dms., c.l., refy .. lb. .06¾- —
dms., l.c.l., dlvd ..... lb. .09½- —
tanks, refy ..... lb. .04½- —
Petroleum pitch (see Asphalt, petroleum).

Petroleum Products

Petroleum product quotations, formerly grouped under one heading, are now listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic contet.t, non-ret dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works. lb. .17½- .19
tanks, works ..... lb. .14½- .17
Petroleum sulfonate, oil soluble, 50-55%, sulfonic content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works. lb. .17 - —
tanks, works ..... lb. .13 - —
o-Phenetidine, dms. c.l. frt. alld. E lb. .91 - —
dms., l.c.l., same basis ..... lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis ..... lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb 3.25 - —
Phenobarbital-Sodium (See sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%), non-ret dms., frt. alld. E of Rockies lb. .18 - —
non-ret. dms. l.c.l. same basis. lb. .19 - —
tanks, same basis lb. .16 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
non-ret. dms., l.c.l., same basis. lb. .18½- —
tanks, same basis ..... lb. .15½- —
39°C. or above, tar distilled non-ret. dms., c.l., same basis lb. .19½- —
non-ret. dms., l.c.l., same basis. lb. .20½- —
tanks, same basis lb. .17½- —
USP, syn., dms., c.l., t.l., frt. alld lb. .20¼- —
dms., same basis ..... lb. .21¼- —
tanks, same basis ..... lb. .18¼- —
Phenolphthalein, USP or yellow, fib. dms., 2,000-lb. lots lb. 1.30 - 1.32
fib. dms., smaller lots lb. 1.32 - 1.37
Phenothiazine drencn fib. dms., t.l., dlvd lb. .44 - —
fib. dms., l.t.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms. l.t.l., same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.95 - —
100%, bots ..... lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.25 - 1.75
dl-Phenylalanine, dms., works .... lb. 27.00 -37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E. lb. 3.45 - —
fib. dms., smaller lots, dlvd. E. lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E. lb. .41 - —
ums., t.c.l., dlvd. E. ..... lb. .42 - —
tanks, dlvd. E ..... lb. .38½- —
m-Phenylenediamine dms., frt. alld. lb. 1.05 - 1.10
o-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, refd., dms., works lb. 1.42 - —
Tech., dms., works ..... lb. 1.40 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms. t.c.l., same basis ..... lb. .76¼- —
Phenylethyl acetate bots. ..... lb. 1.30 - 1.60
b-Phenylethylamine, dms., 1,000-lb. lb. lots works lb. 1.10 - —
dms. smaller lots works ..... lb. 1.15 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.45
Standard dms lb. 1.10 - 1.60
Phenylglyconic acid (see Mandelic acid)
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms. 250-lb. lots, dlvd. E. lb. 1.80 - —
fib dms. smaller lots. dlvd E. lb. 2.10 - —
Phenylethylphenyl acetate, bots. lb. 4.00 - 4.25
o-Phenylphenol, dms., t.c.l. works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works ..... lb. .43 - —
Philippine copal gum, pale, chips, bgs. lb. .23¾- .26
nubs, bgs. ..... lb. .32½- .36
seeds, bgs. ..... lb. .20 Nom.
sorts, bgs. ..... lb. .22¾- .25
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works ..... lb. 17.75 - —
Tech., fib. dms., works ..... lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works ..... lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried unground, 66-68% b.p.l., bulk, c.l., mines. long-ton. 5.11 - —
68-70% b.p.l., bulk, c.l., same basis ..... long-ton. 5.51 - —
70-72%, b.p.l., bulk, c.l., same basis ..... long-ton. 6.16 - —
74-75%, b.p.l., c.l., bulk, same basis ..... long-ton. 7.16 - —
76-77% b.p.l., c.l., bulk, same basis ..... long-ton. 8.16 - —
Above Florida prices are based on fuel oil at $2.57 per bbl. and labor at $1.47.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald. 100 lbs. 7.00 - —
cbys., l.c.l., same basis. 100 lbs. 7.25 - 7.75
tanks, t w., works 100 lbs. 5.60 - —
Phosphoric acid, food grade, 80%, cbys., c.l., frt. equald. 100 lbs. 7.85 - —
cbys., l.c.l., works .... 100 lbs. 8.10 - 9.35
tanks, t w., works .... 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works. 100 lbs. 8.50 - —
cbys., l.c.l., works .... 100 lbs. 8.75 - 9.00
tanks, t.w., works ..... 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works. lb. .55 - —
dms., smaller lots, works. lb. .56 - .57
white (yellow), solid dms., c.l., works, frt. equald lb. .20 - .20½
dms., t.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works ..... lb. .15 - —
tanks, works ..... lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works. lb. .13½- —
dms., t.c.l., works ..... lb. .14½- .15½
solid, dms., c.l., works ..... lb. .11½- —
dms., t.c.l., works ..... lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works. lb. .1395- .1450
dms., t.c.l., works ..... lb. .1550- .1650
Phosphorus sesquisulfide, dms., cs., c.l., works. lb. .38 - —
dms., t.c.l., works ..... lb. .39 - .40
Phosphorus trichloride, dms., c.l., works. lb. .14 - —
dms., t.c.l., works ..... lb. .15 - —
tanks, works ..... lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald. lb. .21 - —
bgs., t.c.l., same basis ..... lb. .22 - —
tanks, same basis ..... lb. .20½- —
Phthalimide, 97-98%, dms., frt. allowd. lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies. lb. 3.45 - —
Resinated, bbls. same basis . lb. 3.00 - —
Water dispersable, bbls., same basis. lb. 1.69 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works. lb. 3.95 - —
Resinated, bbls. ..... lb. 3.50 - —
Water dispersable, bbls. ..... lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies.
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more. lb. 5.00 - —
NF, fib. dms. ..... lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald. lb. .43 - .43½
dms., t.c.l. works, frt. equald lb. .44 - —
tanks, same basis ..... lb. .415 - .422
b,g-Picoline, 5°C, dms., c.l., works. lb. .32½- —
dms., t.c.l., works ..... lb. .33 - —
g-Picoline, 98%, dms., t.c.l., dlvd lb. 2.00 - —
Picric acid, NF, bbls. ..... lb. .55 - —
Tech., bbls. ..... lb. .44 - —
Pigment green B, kgs. ..... lb. 1.45 - —
Pilocarpine hydrochloride, USP, bots. oz. 4.75 - 5.25
Pilocarpine nitrate, USP, bots., vials. oz. 4.65 - 4.75
Pimento, Jamaican, bgs ..... lb. .65 - —
Mexican, bgs. ..... lb. .31½- —
Pimento berry oil, NF, dms ..... lb. 3.75 - 9.25
Pimento leaf oil, cns ..... lb. 2.00 - 2.60
Pine oil, dest.-dist., dms., t.c.l., works. lb. .15 - —
dms., t.c.l., ex whse New York. lb. .173 - —
Steam-dist., dms., ex whse, New York. lb. .176 - —
dms., dlvd. ..... lb. .179 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pinetar oil, coml., dms., c.l., works. lb. .0561- —
dms., t.c.l., works ..... lb. .0634- —
dms., c.l., ex whse., New York. lb. .0745- —
tanks, works ..... lb. .046 - —
Rectified, NF, dms., included, t.c.l., works, south gal. 1.25 - —
dms., incl. t.c.l., ex whse., New York. gal. 1.36½- —
Refd., dms., incl., t.c.l., works gal. 1.12 - —
dms. incl., t.c.l., ex whse., New York. gal. 1.23½- —
Pink root, bls. ..... lb. 2.50 - —
Piperazine, dry, dms., t.l., frt. alld. lb. 1.95 - —
dms., t.c.l., same basis ..... lb. 2.00 - —
Piperazine citrate, 100-lb. lots .... lb. 1.24 - —
Piperazine hexahydrate, 100-lb. lots. lb. 1.10 - —
Piperidine, dist., dms., frt. equald. lb. 1.10 - —
Piperonyl butoxide, dms., dlvd. E. lb. 4.50 - 5.05
Piperonyl cyclonene dms. dlvd. E. lb. 3.70 4.25

Pitches

Pitch quotations, formerly grouped under one heading, are now listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works ..... oz. 64.00 -70.00
Pleurisy root, bls. ..... lb .45 - .50
Podophyllum resin, NF, dms .... lb. 15.60 -16.10
Poke root, ols. ..... lb. .19 - .23
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25-billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
dms., 10,000-20,000-lb. lots, works lb. .43 - —
dms., smaller lots, works ..... lb. .46 - .48
Polyoxyethylene sorbitan tristearate, dms. 20,000-lb lots, works. lb. .41 - —
dms., 10,000-20,000-lb. lots, works. lb. .43 - —
dms., smaller lots, works lb. .46 - .48
Pontianak copal gum, chips, bgs lb. .26 - —
Nubs, bgs. ..... lb. .37 - .40
Poppy seed, Argentine, bgs ..... lb. No stocks.
Dutch, bgs. ..... lb. .25½- —
Danish ..... lb. .24¾- —
Polish, bgs. ..... lb. .26 - —
Turkish, bgs. ..... lb. No stocks.
Potash, caustic, liq., 45% basis, dms., c.l., works. 100 lbs. 4.25 - —
dms., t.c.l., same basis. 100 lbs. 5.05 - —
tanks, same basis ..... 100 lbs. 3.70 - —
Flake, 88-92%, dms., c.l., same basis. 100 lbs. 9.15 - —
dms., t.c.l., same basis. 100 lbs. 10.20 - —
Solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 - —
dms., t.c.l., works ..... 100 lbs. 9.75 - —
Potassium acetate, NF, dms .... lbs. .31 - .36
Potassium bicarbonate, USP, gran., dms lb. .22 - —
USP, powd., dms ..... lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., t.c.l., works ..... lb. .18½- .19¼
Potassium bichromate in dms. ¼c. higher.
Potassium bitartrate, NF, dom., gran. or powd., dms., c.l. lb. .40 - —
dms., 5,000 lbs., 1 shipt. lb. .40½- —
dms., smaller lots ..... lb. .41 - .43
Imp., gran. or powd., kgs .... lb. .33½- .37
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .63
Potassium bromide, USP, gran., bbls., kgs. lb. .39 - .40
Potassium carbonate, NF, gran., bbls., dms lb. .20 - —
NF, powd., bbls., dms ..... lb. .21 - .22
Tech., calcined, bgs., c.l., works. 100 lbs. 8.50 - —
bgs., t.c.l., same basis. 100 lbs. 9.55 - —
hydrated, 83-85%, bgs., c.l., works. 100 lbs. 7.10 - —
bgs., t.c.l., works ..... 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms, c.l., works. lb. .12¼- —
dms., t.c.l., works ..... lb. .13½- .14¼
Powd., dms., c.l., works ..... lb. .12¾- —
dms., t.c.l., works ..... lb. .14 - .15
works lb. .12¼- —
NF, cryst., works, dms., 2,000 lbs. or more, works. lb. .16¾- —
Gran., 25-lb. metal dms ..... lb. .36 - —
Powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride, agricultural (see Potassium muriate).
Potassium chloride, indust., 99.9% KCl, bulk, c.l., works. ton.29.00 - —
bgs., c.l., works ..... ton.33.50 - —
99.3% KCL, bulk, c.l., works. ton.27.00 - —
bgs., c.l., works ..... ton.31.50 - —
USP, cryst., dms. ..... lb. .20 - .22
gran., dms. ..... lb. .21 - .23
powd., dms ..... lb. .24 - .26
Potassium chromate, tech., bgs lb. .50 - .50¼
Potassium citrate, USP, gran., dms. lb. .43 - —
Powd., dms. ..... lb. .40½- .41¼
Potassium cyanide, dms. 20,000-lb. lots or more works .. lb. .45 - —
dms., 2,000-19,999-lb. lots, works. lb. .453 - —
dms., smaller lots, works ..... lb. .465 - —
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works ..... lb. .65 - —
Potassium ferrocyanide, dms., ton lots .. lb. .24½- —
dms., smaller lots ..... lb. .29 - —
Potassium fluoborate, fib. dms., c.l., works. lb. .30 - —
fib. dms., t.c.l., works ..... lb. .31 - —
Potassium fluoride, dms., works. lb. .37 - .38
Potassium gluconate, dms. ..... lb. 1.67 - —
Potassium guaiacolsulfonate, NF, dms. lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash, caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33¼- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots .. lb. 1.38 - —
Potassium Iodide, 250-lb. dm. ... lb. 1.43 - —

Potassium manure salt, 22% K_2O, bulk, c.l., works ... unit-ton. .17 - .1769
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. ... lb. .27 - —
Potassium muriate, standard and gran., 59-63% K_2O, bulk, c.l., works, base price unit-ton. .38 - .38½
Gran., 60-63% K_2O, bgs., c.l., works, contract price ... ton.26.23 -26.50
bgs., c.l., works, list price ton.27.45 -27.50
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs.16.50 - —
bbls., smaller lots ... 100 lbs.17.50 -18.00
NF, gran., bgs., 20-ton lots ... 100lbs. 9.25 - —
bgs., smaller lots ... 100 lbs.10.50 -11.00
NF, powd., bgs., 20-ton lots 100 lbs.10.25 - —
bgs., smaller lots ... 100 lbs.11.50 - 12.00
Potassium oxalate, neutral, tech., fine gran., bbls., dms. lb. .32 - .34
Potassium pentaborate, gran., dms., c.l., works ... ton.219.50 - —
dms., ton lots, ex whse ... ton.311.00 - —
dms., smaller lots, ex whse ... ton.316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works ... lb. .19 - .20
Potassium permanganate, coml. kgs., works lb. .26 - .29
USP, dms., works ... lb. .29¼- .31
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works ... lb. .18 - .21
Potassium pyropnosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferrocyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
Potassium silicate, 29° Be, 1:2.0, dms., l.c.l., 5 dms. or more, works ... 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
30° Be, 1:2.0, dms., l.c.l.,
Potassium silicate, grade, 40.5° Be, 1:2.1, dms., c.l., works ... 100 lbs. 5.85 - —
dms., l.c.l., 5 dms. or more works ... 100 lbs. 6.70 - —
tanks, works ... 100 lbs. 5.60 - —
Potassium silicate glass, bgs., c.l. works ... 100 lbs.17.30 -18.15
bgs., l.c.l., works 100 lbs.17.80 - —
Potassium silicate, soln., 29° Be, 1:2.5, dms., c.l., works ... 100 lbs. 4.95 - —
dms., l.c.l., 5 dms. or more works ... 100 lbs. 5.70 - —
tanks, works ... 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld. E ... lb. .755 - .827
Potassium sulfate, agricultural 50% K_2O, bulk, works, base price unit-ton. .64 - —
bulk, works, July forward, unit-ton. .67 - —
Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
Gran., dms. ... lb. .18½- —
Powd., dms. ... lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works ... lb. .77 - .79
Potassium titanate, ctns., c.l., works, lb. .16¼- —
ctns., 5-ton lots, works ... lb. .16½- —
ctns., 1-ton lot or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton.13.45 - —
bulk, works, July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. or powd. dms., c.l. lb. .42½- —
dms., 5,000-lb. lots ... lb. .43 - —
dms., smaller lots ... lb. .43½- .49
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works ... lb. .52½- .55
Potato starch (see Starch, potato)
Pregnenolone, bots. ... gram. No prices
Pregnenolone acetate, bots ... gram. No Prices
Procaine hydrochloride, USP, dms., 1,000-lb lots, frt. alld lb. 2.83 - —
dms. 100-500 lb lots ... lb. 2.95 - 3.15
Progesterone, USP, bots. ... gram. No Prices
Progesterone acetate, bots ... gram. No Prices
Propane indust. tanks, group 3, gal. .05 - —
tanks, Baton Rouge ... gal. .05375- —
tanks, New York harbor ... gal. .1005- —
(¼c. discount offered).
Propenyl guaethol, dms. ... lb.24.30 -27.00
Propionic acid, syn., pure, dms., c.l., works lb. .22¾- —
dms., l.c.l., works ... lb. .23¾- —
tanks, works ... lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd. ... lb. .15¾- —
tanks, dlvd. ... lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd ... lb. .15 - —
tanks, dlvd. ... lb. .11½- —
n-Propyl gallate dms., 100 to 2,000-lb lots works lb. 3.90 - 4.40
n-Propyl p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo.55.00 - —
bots., smaller lots ... kilo.55.10 -55.30
Propylene dichloride, consumers, dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis ... lb. .0950- —
tanks, same basis ... lb. .07 - —
Propylene dichloride prices in West 1c. higher same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis ... lb. .17 - —
tanks, same basis ... lb. .13½- —
Propylene glycol, USP, dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis ... lb. .19 - —
tanks, same basis ... lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis ... lb. .21 - —
tanks, same basis ... lb. .18½- —
Propylene oxide dms., c.l., dlvd E. lb. .18 - —
dms., l.c.l., dlvd E ... lb. .19 - —
tanks, dlvd E ... lb. .15½- —
Psyllium seed, black, bgs. ... lb. .32 - .34
Blonde, bgs. ... lb. .16 - —
Husks, bgs. ... lb. .39 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots, lb. .03¾- .04¼
bgs., smaller lots. ... lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs., ton lots ... lb. .04 - —
sun dried, coarse, bgs ... ton.60.00 - —
fine, bgs. ... ton.60.00 -70.00

Pumpkin seed, bgs ... lb. .83 - .90
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
Powd., 1.3% pyrethrins, bbls., works lb. .53 - —
Pyrethrum liquid, 20/1 basis (3 grams pyrethrins per 100cc odoriess base), dms., works gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odoriess base) dms., works gal.41.75 -42.75
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb.10.00 - —
purif., 20% dms., works ... lb.10.00 -10.10
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb. .73 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .24½- —
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls ... lb 3.17 - 3.23
Pyrogallol, NF, 100 lb dms ... lb 3.50 - —
Pyroxylin, USP, bots ... lb. 9.50 - —

Q

Quassia chips ... lb. .17 - —
Quebracho extract, clarified, grd., 70% tannin, bgs., works lb. .16½- .17
Clarified, liq., 35% tannin, bbls., works lb. .08½ .08½
Clarified, solid, 64% tannin, bgs., c.l., ex dock lb. .108718- —
Ordinary solid 63% tannin, bgs., c.l., same basis lb. .099228 —

Quercetin, fib, dms. kilo lots kilo.26.40 - —
Quercitron extract, cryst. No 1, bbls., l.c.l. lb. .40 - —
Liq., No. 1, bbls. l.c.l. ... lb. .19 - —
Quicksilver (see Mercury metal)
Quince seed, bgs ... lb. 2.00 Nom
Quinidine sulfate, USP ens. 1,000-oz. lots oz. .74½- .75
Quinine, NF, ens., 100 oz. lots oz. .54 - —
Quinine bisulfate, USP ens., 100-oz. lots oz. .28 - .29
Quinine hydrochloride ens. 1,000-oz. lots oz. .32 - —
Quinine sulfate, USP ens. 1,000-oz. lots oz. .27½- .29
Quinoline, dms., c.l. frt. equald lb. .50¾- —
dms., l.c.l., same basis ... lb. .51¼- —
tanks, same basis ... lb. .50 - —

R

R salt, paste, dms. frt alld., 100% basis lb. .88 - —
Powd., frt. alld. 100% basis lb. .98 - —
Rapeseed oil, dms., ... lb. .17½- .18
tanks ... lb. .16 - —
Rare earth oxalate 45-50%, bgs., works lb. 1.00 - —
Rauwolfia serpentina root powd., bbls., dms lb. 1.50 - —
Red, carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

Red Pigments

Red pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red)
Red saunders, NF powd. bbls lb. 35 - .40
Reserpine, cryst., bots. ... gram. 1.40 - 1.60
Resorcinol, tech grade, dms., c.l., works frt. equald ... lb. 77½- —
dms., l.c.l. same basis ... lb 78½- —
USP cryst. dms works ... lb 2.75 - —
powd., dms. works ... lb 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. lb. .15 .16
Rhodamine red toner, molybdated, PMA, kgs lb. 6.00 - —
Tungstated, PTMA works, kgs lb 6.60 - —
Rhodinol, 5-lb. cans ... lb.33.00 -39.00
Synthetic ... lb.15.00 -16.00
Rhubarb root, India, whole, bgs lb. .30 - —
Powd., bgs. ... lb. .38 - —

METHYL ETHYL KETONE

Trays, tables, desks, lamps and many other pieces of fine furniture are being finished with acrylic lacquer to assure a durable and beautiful surface coating. One of the important solvents in this new lacquer is Methyl Ethyl Ketone, supplied by the Enjay Company.

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Riboflavin USP tb dms., kilo or more dlvd kilo 40.00 - —
USP readily soluble bots. dlvd. kilo 130.00 - —
Riboflavin, 5-phosphate-sodium, fib. dms., kilo or more, dlvd. kilo. 107.50 - —
Rice bran oil, clarified., dms., l.c.l. tanks, dlvd. E lb. .14 Nom.
Rice starch (see Starch, rice).
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian, bots oz. 72.00 - —
Turkish, bots. oz. 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb. .95 - 1.40
tech., cns., dms lb. .50 - 1.10
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 - —
resin, 25-45% fib dms. works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 — —
tanks, group 3 gal. .13375- —
Rue oil, bots. lb. 2.75 - 3.00
Rutin NF fib dms., 10 kilo lots kilo. 16.50 - —
fib. dms., 5 kilo lots kilo. 17.00 - —
fib. dms., 1 kilo kilo. 18.00 - —
Ryania 100%, powd., bgs., c.l., works lb. .22 - —
bgs. l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium fib. dms., 1,000-lb lots works lb 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms., smaller lots lb 1.70 1.80
USP, powd., soluble insoluble, dms., 1,000-lb lots lb. 1.65 - —
dms., smaller lots lb. 1.75 1.95
Safflower oil, dms., New York lb. .1785- .1835
tanks, same basis lb. .1585- —
Safrol, dms. lb. .80 - .95
Saffron, Mancha Superior, tins lb. 36.00 - —
Sage, Greek, bgs lb. .14 - —
Dalmatian, cns. lb. .36 - .40
Italian, cns. lb. .14 - —
Sage oil, clary, bots. lb. 25.00 -32.00
Dalmatian, cns. lb 3.75 - 4.00
Spanish, cns. lb 1.20 - 1.45
Sago flour, raw bgs. lb. .07 .07¼
Refd., bgs. lb. .09 - .09¼
Sal soda (see Soda salb.
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb. 1.23 - —
dms., l.c.l., same basis lb. 1.25 - —
Salicylamide, 100-lb. dms lb 1.05 1.15
Salicylic acid, crude, fib. dms., c.l., t.t., frt. alld lb. .37¼- —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
sublimed, tech., fib. dms., c.l., t.t., dlvd lb. .39¼- —
fib dms., l.c.l., dlvd lb. .43½- —
Salicylic acid, USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .50½- —
less than 1,000 lbs lb. .53½- —
100 lb. fib. dms. 1,000 lbs. or more lb. .52½- —
less than 1,000 lbs. lb. .55½- —
USP, powd., 100 lb. fib. dms., 1,000 lbs. or more lb. .57½- —
less than 1,000 lbs lb. .60½- —
Salol, NF, gran., bbls., kgs. lb. 1.20 - —
Powdered salol, 25c per lb higher
Salt, rock, paper bgs., c.l. 100 lbs. 1.09 - —
Salt, table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na2SO4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian chips, bgs. lb. .65 - .66
Powd., fib. dms lb. .75 - .76
Sandalwood oil, cns. lb. 11.20 -13.25
Sarume oil, crude tanks, Pac. coast. lb. No stocks.
Sassafras oil, artif. dms. lb .50 .62
Nat., dom., dms lb. 1.70 - 2.15
Savin oil, USP, cns. lb. 7.50 - —
Savory oil, cns lb 4.25 - —
Schaeffer's salt paste, dms., frt. alld. 100% basis lb. .85 - —
Powd. bgs., frt. alld. 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 -15.90
Sebacic acid, CP, dms., c.l., works. lb. .69½- —
dms., l.c.l., works lb. .71½- —
Purified, dms., c.l., works lb. .65½- —
dms., l.c.l., works lb. .67½- —
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fib dms. smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls lb. 2.65 2.70
Senna leaves, Alexandria, whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .19 - .20
No. 2, bls lb. .16 - .17
No. 3, bls lb. .14 - —
pods, bls lb. .22 - —
powd, bbls., bxs lb. .17 - —
Serpentaria root, bls lb. 7.50 8.00
Sesame oil, USP, dms lb. .38 - .39
Sesame seed, Indian nat., bgs lb. No Prices.
Mediterranean, hulled, bgs lb. .21½- —
nat. bgs. lb. .17 - —
Nicaraguan, hulled, shipt., bgs., lb. .25 - —
nat., bgs. lb. .17 - —
Salvadorian, nat., bgs. lb. .17 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Bleached, refd., bgs., 1,500-lb. lots. lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac orange, lemon No. 1, bgs., 10-bg. lots lb. .38 - .39
lemon No. 2, bgs., 10-bg. lots lb. .36 - .37
superfine, bgs., 10-bg. lots lb. .34 - .35
TN, bgs., 10-bg. lots lb. No Stocks
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —

Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l. works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry grd. 325 mesh, bgs. c.l., works ton. 25.00 - —
bgs. l.c.l. works ex whse. ton. 45.00 - 55.00
hard-quartz, 99½% 325 mesh, bgs. c.l. works ton. 20.00 - —
bgs. l.c.l. works ton. 25.00 - —
99½%, 140 mesh bgs., c.l., works ton. 15.00 - —
bgs. l.c.l. works ton. 20.00 - —
Silicon tetrachloride tech. dms., c.l. works lb. .18 - —
dms., l.c.l. works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots cs Troy oz. .88⅝- —
Silver cyanide, bots., 1,000-oz. lots, oz. .89½- —
bots., 500-oz. lots oz. .90 - —
bots., 100-oz. lots oz. .91 - —
Silver nitrate CP, cryst., bots., 2,500-oz. lots oz. .63¼- —
bots., 1,000-oz. lots oz. .63⅜- —
bots., 500-oz. lots oz. .64½- —
bots., 250-oz. lots oz. .64¾- —
USP granular silver nitrate 4c. per oz. higher
Silver proteinate, mild, USP bots., dms. 1,000-oz lots oz. 1.15 - —
Strong, NF bots dms. 1,000-oz. lots oz 1.10 - —
Snakeroot oil, Canada, cns. lb. 53.00 - —
Soapbark, crushed, bls lb. .35 - —
Powd., bls. lb. .35 - —
Whole, bls. lb. .30 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts 100 lbs. 3.00 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs. l.c.l. stock pts 100 lbs. 3.95 4.72
bulk, c.l., works 100 lbs 1.55 - —
Soda, caustic, flake 76% dms. c.l., works, frt. equald 100 lbs. 5.20 - —
Liq., 50% sellers tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 3.00
73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
73%, rayon type, sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
Soda, caustic, solid, 76%, dms., c.l., works 100 lbs. 4.80 - —
Soda, sal. conc. bgs c.l. works, 100 lbs. 2.50 - —
bgs. smaller lots works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF, 60%, gran. dms., c.l., works lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dms. 300 lbs or more lb. .93 - —
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb. 2.70 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .25½- —
bgs., l.c.l., dlvd. E lb. .27 - —
Sodium arsenate, 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 - —
dms., less than ton lots, works lb. .26½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works. lb. .17½- —
dms., less than ton lots, works. lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo lots kilo. 10.00 - —
dms., 10-kilo lots kilo. 10.35 - —
dms., 5-kilo lots kilo. 10.75 - —
dms., 1-kilo lots kilo. 11.00 - —
bots., 500-gram bots kilo. 11.50 - —
Sodium benzoate, tech. c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, c.l., t.l., frt. alld lb. .38 - —
ton lots, same basis lb. .43 - —
1,000-lb. lots, same basis lb. .45 - —
Sodium bicarbonate USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works. 100 lbs. 2.55 - —
ogs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bifluoride bbls. c.l., works, frt. equald lb. .19½- —
bbls., l.c.l., same basis lb. .1990- —
Sodium bisulfate, bulk c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35°, bbls., c.l., works. 100 lbs. 1.70 - —
bbls., l.c.l. works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst. monohydrated (see Soda sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC)
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09½- 10½
Sodium chlorate in 100-lb. dms. only, ¼c. per lb. higher.
Sodium chloride tech (see Salt).
Sodium chloride, USP gran. bgs. lb. .05 —
Sodium chlorite, tech. dms., c.l., works lb. .58 - —
dms. 20-ton lots or more works. lb. .66 - —
dms. smaller lots works lb. .70 .73
Sodium chloroacetate tech., dms., c.l., works lb. .27 - —
dms. l.c.l. works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms. l.c.l. works lb. .15¼- .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs. l.c.l. lb. .1065- 1190
Sodium citrate, anhyd. dms. lb. .62 —
NF VIII, gran., dms lb. .26½- .27½
USP XIV gran. dms lb. .29½- .30½
Sodium citrate USP powd. prices ½c. higher.

Sodium cyanate, dms. 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 - 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb lots lb. .193 - —
dms., over 1,000-lb. lots lb. .203 - —
dms., 100-lb. to 1,000-lb lots. lb. .213 - —
Gran. sodium cyanide 1c higher.
Sodium diacetate, 33-35% acidity, 250-lb. dms. works lb. .15 - —
250-lb dms. l.c.l. works lb. .15¾- —
Anhyd., dms. c.l., works lb. .18 - —
dms., l.c.l. works lb. .18¾- —
Sodium ferrocyanide bgs. 10-ton lots lb. .13½- —
bgs., smaller lots lb. .14 - —
Sodium fluoride, white, 97% fib. dms., c.l. works, frt. equald lb. .1390- —
fib. dms., l.c.l. works, frt. equald lb. .1430- —
Sodium formate bgs. c.l. works. 100 lbs. 7.00 - —
bgs., l.c.l., works 100 lbs. 8.65 - —
Sodium gentisate, 100-lb fib dms. lb 5.50 - —
Sodium gluconate, refd. dms. lb. .84 - —
Tech., dms., bgs. lb. .37 - .39
Sodium hydride powd. dms. works. lb. 1.90 - 2.75
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite dms. c.l., frt. alld lb. .23¾- —
dms., l.c.l., frt. alld lb. .24¾- —
Sodium hydroxide, NF, pellets, 100-lb dms. 1 to 100-dm lots. lb. .23½- .28
Sodium hydroxide tech (see Soda, caustic).
Sodium hypophosphite NF dms., 1,000-lb. lots lb. .97 - —
Sodium hyposulfite, anhyd. photo grade, bgs. c.l., works. 100 lbs. 7.50 - 8.05
bgs., l.c.l., works 100 lbs. 7.89 - 8.45
Tech., bgs., c.l., works 100 lbs. 7.25 - —
bgs., l.c.l., works 100 lbs. 7.60 - —
Sodium hyposulfite hexahydrate, pea, cryst. bgs., c.l., works 100 lbs. 5.15 - —
bgs. l.c.l. works 100 lbs. 5.55 - —
photo grade bgs. c.l. works. 100 lbs. 7.75 - —
bgs., l.c.l. works 100 lbs. 8.05 - —
Sodium hyposulfite pentahydrate, tech., bgs. c.l., works. 100 lbs. 4.65 - 5.15
bgs., l.c.l., works 100 lbs. 4.90 - 5.55
Sodium iodide, USP, 300-lb. dm lb. 1.98 - —
Sodium lactate, edible 60% cbys., dms. works lb. .26½- —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .19 - —
dms., l.c.l., dlvd lb. .19½- .20¾
tanks, dlvd lb. .18 - —
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate octahydrate, gran., bgs., c.l. works ton. 92.00 - —
bgs., ton lots, ex whse ton. 150.00 - —
bgs., smaller lots ex whse. ton. 155.00 - —
Sodium metaborate tetrahydrate, bgs., c.l., works ton. 200.00 - —
bgs., ton lots, ex whse ton. 268.50 - —
bgs., smaller lots, ex whse ton. 273.50 - —
Sodium, metallic, bricks, c.l. works. lb. .19½- —
Fused, 18,000-lb. lots or more, works lb. .19 - —
tanks, works lb. .17 - —
Sodium metanilate bbls. frt. alld. lb. .62 - —
Sodium metasilicate anhyd., bgs., c.l., works 100 lbs. 5.70 - —
bgs., 6,000-19,900 lb lots, works. 100 lbs. 6.05 - —
dms., c.l., works 100 lbs. 6.20 - —
dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l. works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs. 4.80 - 6.75
dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., works 100 lbs. 5.30 - 7.25
Sodium molybdate anhyd., dms., works, f.t equald lb. .92 - .96
Cryst., dms., works, frt alld lb. .73 - .74
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate bbls lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton. 48.75 - —
bulk, c.l., works ton. 45.25 - —
Sodium nitrate, imp., 100-lb. bags., c.l., Atl., Gulf, Pac., whse. ton. 49.75 - —
bulk, c.l., same basis ton. 46.25 - —
Sodium nitrite, USP bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs. 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Sodium orthosilicate, hydrated, flake, bbls., c.l., works. 100 lbs. 5.85 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 98% bgs., works. 100 lbs. 12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, bgs. c.l. works, frt. equald lb. .26 - —
bgs., l.c.l., same basis lb. .27½- .34
Pellets, bgs., c.l., same basis lb. .26 - —
bgs., l.c.l., same basis lb. .27½- .34
Sodium pentachlorophenate, powd., bgs., dms., c.l., same basis. lb. .25 - —
bgs., dms., l.c.l. same basis lb. .26½- .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.
Sodium perborate, NF, tech., bgs., c.l., works lb. .19 - —
bgs., l.c.l., works lb. .21 - —
Sodium peroxide dms c.l., t.l., dlvd. E. of Miss lb. .20½- —
dms., l.c.l. same basis lb. .21 - .21½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenolsulfonate, USP IX, gran., dms lb. .50 - .51
NF, powd., dms. lb. .53 - .54
Sodium phosphate, dibasic, anhyd., bgs., c.l. frt. equald. 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
Dibasic, USP, dried powd. bgs., dms. works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., same basis 100 lbs. 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.05 - —
bgs., l.c.l., frt equald. 100 lbs. 9.45 -10.05
Tribasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.60 - —
bgs., l.c.l., frt. equald 100 lbs. 5.00 - 5.75
Sodium phosphate in dms., 60c. to 80c. higher than bgs.

Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald. 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 -12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms. l.c.l., works lb. .37 - .39
Sodium pyrophosphate, tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.81 - —
bgs. l.c.l., same basis. 100 lbs. 9.21 9.71
Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 - —
bgs., l.c.l. dlvd zone 1 100 lbs 4.10 4.35
bgs., l.c.l., dlvd. zone 2 100 lbs 4.35 4.60
dlvd zone 3 100 lbs 4.75 4.90
dlvd Zone 4 100 lbs 5.35 5.60
Sales zones are: (1) Atl. states E. of Miss., R and N of south bound of Ky and Va., Ala., La., and Miss. south of 31° Tex. E of 100°; S of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones: Davenport, Ia., and St. Louis; (2) Ark. E of 98° Ga.; Iowa (except Davenport), Minn. Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 98°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex. W. of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs 5.00 - —
bgs., 6,000-19,900 lb. lots, works. 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb lots, works. 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be, turbid, 1:3.2, dms., c.l., works. 100 lbs 1.55 - —
dms., l.c.l., works 100 lbs 1.90 2.40
tanks, works 100 lbs 1 20 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs 1.90 - —
52° Be turbid 1:2.4, dms., c.l., works 100 lbs 2.65 - —
Sodium silicate, liq., dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs 2.30 - —
Solid, 1:3.2, bgs., works ton 67 50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs. l.c.l. works lb. .069 - —
Sodium silicofluoride in dms. 0.4c. per lb higher
Sodium stannate dms. works, frt. alld. E lb. .608 - .668
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate bbls. works lb. .22 - —
Sodium sulfate, NF VII, dried, powd. dms lb 22½- —
Sodium sulfate, tech., anhyd., bgs., c.l., dlvd. E ton. 54.00 - —
detergent, rayon grade, bgs. c.l., works ton. 36.00 - —
bulk, c.l., works ton. 32.00 - —
USP, cryst., fib dms lb .17½ .18
gran. fib dms lb. .17½ .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt equald. lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq. 40-44% tanks works, lb. basis ton. 130 00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls. c.s. works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd. bgs. c.l. works 100 lbs. 7.55 - —
bgs. l.c.l. same basis 100 lbs 7.95 - —
Tech. bgs. c.l., works 100 lbs 3.50 - —
bgs. t.l. same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40%, dms., c.l. works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms. lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Sodium thiosulfate, tech. (see Sodium hyposulfite).
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt. alld E. lb. .37½- —
90%, 100-lb. dms., l.c.l., frt. adjusted, E lb. .39½- —
Sodium trichloroacetate, 90%, 50-lb. dms., c.l., frt. alld. E lb. .38 - —
50-lb dms., l.c.l., frt. adjusted, E lb. .40 - —
10-lb. cns., c.l., frt. alld E lb. .44 - —
10-lb. cns., l.c.l., frt. adjusted, E lb. .46 - —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.16 - —
bgs., l.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.95 - —
bgs., l.c.l., works 100 lbs. 9.70 -10.10
dms., c.l., works 100 lbs. 9.45 - —
dms., l.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech., kgs., dlvd. E lb. 1.18 Nom.
Sodium-ammonium phosphate, purit., cryst., dms., works lb .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .33
Solvent naphtha, petroleum, aromatic 312°-365°F. b.r., 17.2°C. m.a.p. tanks, New Jersey gal. .345 - —
315°-350°F. b.r., 17.2°C. m.a.p., tanks, Texas City gal. .35 - —
322°-351°F. b.r., 15°C. m.a.p., tanks, Baytown, Texas. gal. .32 - —
324°-349°F. b.r., 19°C. m.a.p., tanks, Houston gal. .33 - —
334°-392°F. b.r., 19°c. m.a.p., tanks, Philadelphia gal. .25 - —
365°-404°F. b.r., 19°C. m.a.p., tanks, New Jersey gal. .43 - —
367°-421°F. b.r., 20°C. m.a.p., tanks, Baytown, Texas. gal. .32 - —

Solvent naphtha, petroleum, partial aromatic, 205°-282°F. b.r., 38°C. m.a.p., tanks, New Jersey gal. .24 - —
211°-277°F. b.r., 25.6°C. m.a.p., tanks, New York, New Jersey gal. .28 - —
212°-293°F. b.r., 38°C. m.a.p., tanks, Philadelphia gal. .24 - —
224°-280°F. b.r., 48°C. m.a.p., tanks, Houston gal. .215 - —
266°-374°F b.r. 28°C. m.a.p., tanks, Philadelphia gal. .27 - —
282°-325°F b.r., 41.6°C. m.a.p. tanks, Houston gal. .25 - —
284°-383°F. b.r., 35°C m.a.p., tanks, Philadelphia gal. .27 - —
352°-413°F b.r. 36°C. m.a.p., tanks, Houston gal. .33 - —
358°-401°F. b r., 24.4°C. m.a.p., tanks, New Jersey gal. .38 - —

Sorbitan monostearate, fib dms., 20,000-lb lots, works lb. .32 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .34 - —
fib dms., smaller lots works fib. .37 - .39
Sorbitan tristearate, fib dms., 20,000-lb lots, works lb. .33 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib dms., smaller lots works lb. .38 - .40
Sorbitol, cryst. resin grade, pellets, dms., c.l., works lb. .23 - —
dms. 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., c.l., works lb. .36 - —
dms., 1 to 5-ton lots, works, lb. .38 - .39
Sorbitol, soln., comi., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
NF, rec., 70% aqueous, dms., c.l., works lb. .16 - —
dms., ton lots, works lb. .16¾- —
dms., smaller lots works lb. .17 - —
tanks, works lb. .15 - —
Soya protein, chemically isolated, bgs., c.l., works lb. .23 • —
bgs., l.c.l., works lb. .23½- —
Soybean meal, 44% bulk, Decatur, ton 55.00 -56.00
Soybean oil, crude, tanks, Decatur, lb. .11⅛- —
Foots, soapstock, acid 95%, tanks, N. Y. lb. .05¾- —
Refd., alkali, dms. lb. .1578- .1600
tanks lb. .1378- —
Clarified, dms. lb. .1528- .1550
tanks lb. .1328- —
salad, dms. lb. .15⅞- .16⅛
tanks lb. .13⅞- —
Soybean oil acids, dbl. dist., dms. lb. .19 - .21½
tanks lb. .16½- —
Single-distilled, dms. lb. .17¾- .20¼
tanks lb. .15¼- —
Soybean pitch, dms., works lb. .03 - .03½
Spartein sulfate, cns. oz. .80 • .90
Spearmint leaves, dom., bls. lb. .75 • —
Spearmint oil, NF, dms. lb. 3.65 • 4.80
Sperm oil bleached, winter, 45°, dms. lb. .1725- .1750
tanks lb. .1550- —
Nat., winter, 45°, dms. lb. .1625- .1650
tanks lb. .1450- —
Spermaceti wax, blocks, cs. lb. .31 - .34
Cakes, cs. lb. .32 - .34
Spruce extract, liq., reg. tanks, works lb. .01¾- —
Powd., super, bgs., c.l., works, lb. .05¼- —
bgs., l.c.l., works lb. .05½- —
Spruce oil, cns., dms. lb. 2.10 - 3.55
Squill, white, bls. lb. .16 - .18
White, powd. bbls. bxs. lb. .17 - .20
St John's bread, edible, bls. lb. .14 - .16
Stannic chloride, anhyd., dms., works lb. .767 - .777
Stannic oxide, dms., dlvd. lb. 1.01½- 1.02½
Stannous chloride anhyd., dms., works lb. .965 - 1.459
Stannous chloride, hydrous, cryst., dms., works lb. .83½- .84½
Stannous sulfate, dms., works lb. 1.021 - 1.041
Starch, corn pearl paper bgs., c.l. 100 lbs. 7.38 • —
paper bgs., l.c.l. 100 lbs. 7.53 • —
Powd., paper bgs, c.l. 100 lbs. 7.50 • —
paper bgs., l.c.l. 100 lbs. 7.65 • —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Starch potato, dom., Idaho, bgs., c.l., works lb. .0633- —
Maine, bgs., c.l., works lb. .06½- —
bgs., l.c.l., ex whse, New York, lb. .08¾- .10
Starch, rice, bgs., ex whse lb. .14 - .15
Starch, wheat, bgs. lb. .08½- .09
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs lb. .60 - .61
Stearic acid, dbl. pressed, bgs. lb. .16 - .18½
Single-pressed, bgs. lb. .15½- .18
Triple-pressed, bgs. lb. .18¼- .20¾
Stearine, oleo (see Oleostearine).
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 • —
tanks, western Pennsylvania, gal. .16 - —
tanks, group 3 gal. .13375- —
tankwagon, Boston gal. .20 • —
Chicago gal. .290 • —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 • —
Newark gal. .19 • —
New York gal. .19 • —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 • —
Stramonium leaves, bgs. lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .0850- .0875
Streptomycin sulfate, bulk gram. .0850- .0875
Strontium bromide, NF, cryst., 150-lb, fib. dms. lb. .84 • —
Strontium carbonate, pure, dms., 5-ton lots or more, works, lb. .35 • —
dms., 1-ton lots, works lb. .37 • —
Tech., dms., works lb. .19 • —
Strontium chromate, bbls., works, lb. .46 • —
Strontium iodide, jars, 25-lb. lots, lb. 3.57 • —
Strontium nitrate, bgs., c.l., works, 100 lbs. 11.00 • —
bgs., l.c.l., works 100 lbs. 12.00 • —
Strontium salicylate, NF, dms lb. 1.88 • —
Strontium sulfate, air floated, 90% 325 mesh, bgs., works ton 56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 3.75
Styrax, USP, cs. lb. 1.35 - 1.50
Styrene monomer, polymer grade, 99.6% dms. c.l., frt. alld. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .14½- —

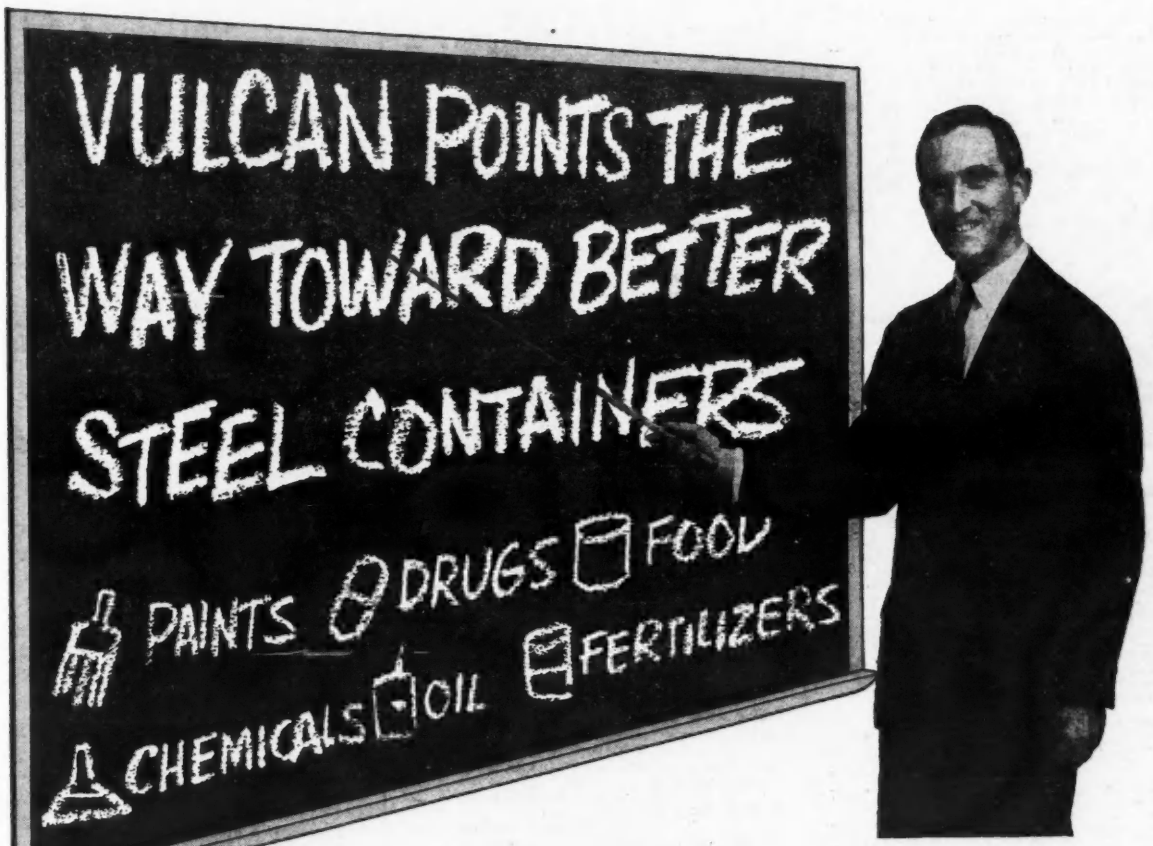
Styrene monomer, tech., 99.2%, tanks, bulk lb. .1260- —
dms., c.l., t.l., same basis lb. .1510- —
dms., l.c.l., same basis lb. .1710- —

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

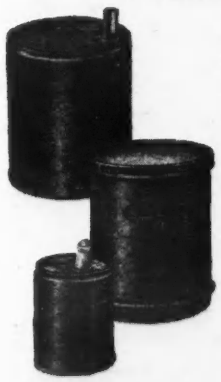
Styrolyl acetate, bots lb. 1.25 - 1.45
Succinic acid, purif., cryst., bbls., works lb. .62 .73
Sucrose, refd., white, bgs. refy. E. lb. .0885- —
Sucrose octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .84 - —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 80-lb ctns., works lb. .65 - .75
80-lb ctns., spot lb. .67¼ - 72¼
Sulfabenzamide, dms kilo. 8.80 9.90
Sulfabenzamide-sodium, dms kilo 9.00 -10.10
Sulfacetamide, USP, fib dms kilo. 7.70 8.80
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP, powd., dms kilo. 22.60 -23.70
Sulfadiazine-sodium, USP, dms. kilo. 24.80 -25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
Sulfamerazine, USP, microcrystals, dms kilo. 23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 -25.90
Sulfamethazine, microcrystals, USP XV, dms kilo. 19.65 -20.75
Powd., dms kilo. 18 75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 —
dms., l.c.l., t.l., works 100 lbs. 17.50 -18.50

Sulfanilamide, NF X, 30-80 mesh, dms kilo. 3.05 - 3.50
NF X, microcrystals, dms kilo. 3.79 - 4.20
NF X, powd., dms kilo 2.85 - 3.30
Sulfanilamide quinoxaline, veterinary, dms kilo. 14.12 -14.85
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 • —
dms., l.c.l., frt. alld lb. .23 • —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, powd. dms. kilo 5.50 5.85
microcrystals, dms. kilo. 6.25 - 6.60
Sulfathiazole-sodium, NF X, dms. kilo 6.05 6.40
Sulfur, comi., flour, bgs., mines, 100 lbs. 2.45 • —
bbls., mines 100 lbs. 3.30 • —
Comi., lump, bgs., mines 100 lbs. 2.35 • —
bbls., mines 100 lbs. 2.90 • —
Sulfur, coml., crude, dom., bright, bulk, f.o.b. cars, mines, long-ton 23.50 • —
Export, f.o.b. vessels Gulf ports long-ton 25.00 • —
US and Canada, f.o.b. vessels Gulf ports, long-ton 25.00 • —
Domestic dark sulfur prices are $1 per long-ton lower.
Sulfur, crude, bulk, imp., Mexican, filtered f.o.b. vessel, Coatzacoalcos long-ton 24.00 • —
Mexican dark sulfur price is $1 per long ton lower

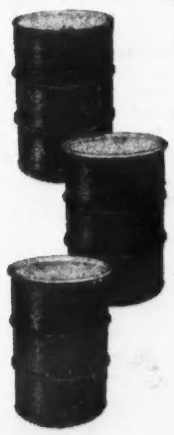
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.15 - —
bbls., mines 100 lbs. 6.50 - —
Sulfur, refd., flour, light, bgs., mines 100 lbs. 4.75 - —
bbls., mines 100 lbs. 5.75 - —
lump, bgs., mines 100 lbs. 4.45 - —
rolls, bgs., mines 100 lbs. 5.00 - —
bbls., mines 100 lbs. 5.75 - —
Sulfur, refd., salt block, bgs., mines, 100 lbs. 4.65 - —
virgin block, bbls. mines, 100 lbs. 4.70 - —
Sulfur, rubbermakers comi., reg., bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.90 - —
Sulfur, rubbermakers, 98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.90 - —
Sulfur, rubbermakers, refd., bgs., mines 100 lbs. 4.40 - —
bbls., mines 100 lbs. 5.55 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.85 - —
bbls., mines 100 lbs. 4.10 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .04½- —
ret. dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., comi., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Refrigeration, 150-lb. cyls., dlvd. lb. .33 - —



VULCAN STEEL PAILS



The manufacturer needing a small package for his requirements can choose exactly the right size and type from the complete Vulcan line of steel pails. Vulcan offers a choice of gauges in both lug cover and closed head types in sizes ranging from one to fifteen gallons.



VULCAN STEEL DRUMS

These drums are the choice of leading manufacturers for the shipment and storage of liquids, plastics, crystals, semi-solids, and powders. All standard drum gauges are available . . . check with us regarding closures and accessories.

CHECK WITH VULCAN ON THESE TOO!

GREASE DRUMS . . . Available in both 120 and 100 pound capacities.

15 GALLON DRUMS . . . A new addition to the Vulcan line—available in open head and closed head types.

VULCAN

Vulcan offers real flexibility with a choice of linings, closures, accessories, and various painting and decorating services. Mail coupon for full information and the name of your Vulcan representative.

VULCAN CONTAINERS INC., Bellwood, Illinois

Gentlemen: I am interested in: OPDR-5

☐ Pails, in the following sizes _____
☐ Hi-Bake protective linings for (product) _____
☐ 55 gallon drums.

Please get this information to

Name _____

Company _____

Address _____

City _____ Zone _____ State _____

Sulfur monochloride 55-gal. non-ret. dms., c.l., frt equald lb. .04½- —
dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfuric acid 60° Be, cbys., c.l., works 100 lbs 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs 2.55 - 3.35
tanks, works ton 22.35 - —
98%, tanks, works ton 23.50 - —
99-100% tanks, works ton 23.95 - —
Sulfuric acid, CP, NF, consumers cbys, c.l. frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt bots extra cs., l.c.l same basis lb. .17¾- .18¾
Sulfuric acid fuming (oleum), 20% tanks, works ton 25.00 - —
40% tanks, works ton 29.00 - —
65% tanks, works ton 39.50 - —
Sumac leaves, 28% tannin, bgs. ex dock ton 205.00 Nom.
28% tannin, grd., bgs. ex dock ton 200.00 Nom.
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton .90 - .93
bulk, c.l. Carteret, N. J. unit-ton .90 - .93
Superphosphate, triple 48% or more a.p.a., pulv., bulk, c.l., East Tampa Fla unit-ton .98 - —
Sweet birch oil USP, northern, ens lb 4.25 - 9.50
USP, southern, ens lb. 2.10 - 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb 1.29 - —
Talc, dom. fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
bgs. l.c.l. works ton 31.00 - 36.00
Dom. fibrous, New York, 99.5%, 325 mesh bgs. c.l. works. ton 31.00 - —
bgs., l.c.l., works ton 34.00 - —
99.95% micronized, bgs., works. ton 38.00 - —
Dom., ord., Calif., grad., bgs., c.l., works ton 34.00 - 39.50
ord., Vermont, off-color, grd., bgs., c.l., works ton 19.40 - —
bgs., l.c.l., works ton 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton 20.00 - 25.00
Tall oil, crude, dms., c.l., works lb. .04¼- .04½
tanks, works lb. .02¾- .03
Dist., dms., c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .06 - .06½
Refd., dms., c.l., works lb. .06¾- —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06
Tall oil acids, dms., c.l., works lb. .10½- .12
dms., l.c.l. lb. .11 - .12½
tanks, works lb. .08½- .10
Tall pitch, dms., c.l., works ton 50.00 - 70.00
tanks, works ton 40.00 - —
Tallow, edible, tanks, dlvd. lb. .11½ Nom.
inedible, fancy bleachable, tanks, dlvd lb. .08¼- —
fancy, guaranteed, dms., f.a.s. lb. .09½- —
No. 1, tanks, dlvd. lb. .07½- —
prime, tanks, dlvd. lb. .08 - —
special, tanks, dlvd. lb. .07¾- —
sulfonated, 25%, bbls., l.c.l. lb. .08¾- .09¼
50%, bbls., l.c.l. lb. .10 - .10½
Tallow acids, dist., dms. lb. .13½- .16
tanks lb. .11 - —
Hydrogenated, dms. lb. .15½- .18
Tallow oil, acidless, dms., c.l. lb. .14½ —
ens, l.c.l. lb 15½ 17
Tangerine oil, Floridian, dms. lb. 3.00 - 3.50
Tankage, animal, feeding, 9-11% ammonia, New York, bulk, unit-ton. 6.50 - —
Animal, feeding, 9-11% ammonia Chicago, bulk, unit-ton. 8.00 - —
Tannic acid, NF, fluffy bbls, 1,000-lb lots lb 2.05 - —
bbls., smaller lots lb 2.06 - 2.10
Powd., bbls., 1,000-lb. lots lb 1.95 - —
bbls., smaller lots lb 1.96 - 2.01
Tech, dms. lb 1.05 - —
Tansy oil, dms. lb. 7.50 - 9.50
Tapioca flour, Brazilian, bgs., ex whse lb. .10½- .11½
Siamese, first quality, same basis, lb. .07 - .07½
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
Tar acid oil, 25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53% dms, c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks same basis gal. .65 - —
Tar coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, dom., NF, 230 or 250-lb dms., c.l. lb. .49 - —
230 or 250-lb dms., 10,000-lb. lots, l.c.l. shipt lb. 49½- —
230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb dms. lb. .51 - —
Imp., bgs. lb .40 - .44
Terpene hydrate, NF, cryst., powd., 100-lb fib. dms lb 70 —
Terpineol, prime, dms lb. .30 - .45
Extra, dms. lb. .41 - .70
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate dms. lb 1.75 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. gram. No Prices
Testosterone proprionate, USP gram. No Prices
Tetrachloroethane dms works lb 14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene).
Tetrachloroethylene USP, 55-gal. dms, c.l., t.l. works lb. .20½- —
dms, l.c.l. works lb. 22 23½
Tetraethyl orthosilicate dms, c.l., dlvd. E lb. .60 - —
dms., l.c.l., dlvd. E lb. .61 - —
Tetraethyl pyrophosphate, 40%, cns. dms. frt equald lb 75 - —
Tetraethylenepentamine cots., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd E lb. .54½- —
tanks dlvd E lb. .51 - —
Tetrahydrofuran, dms, c.l., t.l., works lb .36½- —
dms, l.c.l., or l.t.l., works lb .37 - —
tanks, works lb .35 - —

Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .34½- —
dms., l.c.l., l.t.l., Memphis, Tenn. lb. .35½- —
dms., c.l., t.l., Newark, N. J lb. .36½- —
dms., l.c.l., l.t.l., Newark, N. J. lb. .37½- —
tanks, dlvd. E. of Denver lb. .34 - —
tanks, dlvd. W of Denver lb. .35 - —
Tetrapotassium phosphate (see potassium phosphate)
Thallium metal, dlvd. lb. 7.50 - 10.00
Thallium sulfate, 99% bots., dlvd. lb. 5.00 - 10.00
Theobromine, NF, fib. dms lb 4.50 - —
Theobromine and sodium acetate, USP, fib. dms lb. 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb 3.90 - —
Theophylline, anhyd., or USP, 100-lb dms lb 3.65 - —
Thiamin hydrochloride, USP, reg., fib dms kilo 40.00 - —
USP, ampule grade fib dms kilo 42.00 - —
Thiamin mononitrate, USP, fib. dms kilo 40.00 - —
Thiocarbanilide, dms., ton lots lb 72 - —
dms., less ton lots lb 74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA kgs., works lb. 5.20 - —
Tungstated, PTMA kgs. works. lb. 6.20 - —
Thioglycolic acid refd. cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb. lots, works lb 4.00 - —
Thiourea, tech. bgs. t.l. frt. alld. lb. .33 - —
bgs., l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib dms., 100-lb. lots or more, works lb 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo. 275.00 - —
Thyme leaves, French, bgs lb. .33 - —
Spanish, bgs lb. .14 - —
Thyme oil, NF, red, cns., dms, lb. 2.10 - —
white, cns lb. 2.20 - —
Tech., white cns lb 40 - 1.85
Thymol, fib dms lb 2.60 - 3.00
Thymol iodide NF, dms. lb. 7.30 - —
Timbo root, (see Cube root).
Tin chloride (see Stannous chloride, annyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. .94½- —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd. (see Stannic chloride anhyd.)
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
Anatase, granular, nat., bgs., c.l., f.o.b. Jacksonville, Fla. ton 180.00 - —
5-ton lots, Niagara Falls, N.Y. ton 205.00 - —
bgs., ton lots, same basis. ton 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. 28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg. bgs., c.l., dlvd lb. .09¾- —
bgs., l.c.l., works lb. .09¾- —
50% Ti O_2, high-tinting, dms., c.l., lb. .14¾- —
dms., l.c.l. lb. .14¾- —
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, bbls., l.c.l. lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis, bots kilo. 91.00 - —
dl-a-Tocopherol, bots kilo. 134.20 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 166.00 - —
d-a-Tocopheryl acid succinate, cryst. bots kilo. 148.00 - —
dl-a-Tocopheryl acetate, bots kilo 122.00 —
25% dry. powd. bots kilo. 30.50 - 32.00
o-Tolidine base, dry, kgs., 100% basis lb. 1.55 - —
Paste, kgs., 100% basis lb. 1.50 - —

Toluol

Toluol quotations, both coaltar and petroleum, may now be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, cns lb. 3.50 - 5.00
Toluene coaltar indust. or nitration tanks, dlvd. E. of Rockies gal. .25 - —
Toluene, petroleum, indust., tanks, E. of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
p-Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid, monohydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs to t.l lb 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .25 - —
p-Toluidine, flake, dms, frt. alld lb. .54 - —
Solid, dms., frt. alld lb. .50 - —
o-Toluidine-m-sulfonic acid, frt alld. lb. .70 - —
p-Toluidine-m-sulfonic acid, bbls., works lb. .92 1.04
Toluidine red toner, deep shades, kgs., works lb 1.70 - —
Light shades, kgs. works lb 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura cks lb No prices
Brazilian, Surinam cs lb 1.35 —
Totaquine 100-oz tots, cns oz. .42 - —
Toxaphene, dms., c.l. t.l., works lb .22 - —
dms., l.c.l., l.t.l. works lb .23 - —

Tragacanth gum, No. 1, ribbons, cs lb. 3.50 - 4.50
No. 2, cs lb. 3.40 - —
No. 3, cs lb. 3.00 - 3.10
USP, powd., bbls. lb. 1.25 - 1.38
Triacetin, dms., c.l., dlvd. E. or Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l. frt. alld E of Denver lb. .42½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld E of Denver lb. .40 - —
Tributyl phosphate dms. c.l., works lb. .52½- —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .68½- —
tanks same basis lb. 65 - —
Trichloroacetic acid bots lb 2.00 2.50
Trichlorobenzene, dms c.l., frt. alld. E lb. .15 - —
dms., l.c.l. frt. alld E lb. .16 - —
tanks, frt alld E lb. .13¼- —
Trichlorobenzene prices in the West 1¾c higher.
1,1,1-Trichloroethane, dms., c.l., dlvd lb. .14¾- —
dms., l.c.l., dlvd lb. .17¾- —
tanks, dlvd lb. .13¾- —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½- —
dms., l.c.l., dlvd. E lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt equald lb. .13 - —
dms., l.c.l., frt. alld lb. .15 - .16¾
tanks, works, frt equald lb 12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate 65% soln ret. cbys, works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms, l.c.l., dlvd lb. .36 - —
tanks, dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .34½- —
dms., l.c.l., dlvd lb. .35½- —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., dlvd lb. .26½- —
dms., l.c.l., dlvd lb. .27½- —
Triethanolamine, dms., c.l., dlvd. E lb. .24½- —
dms., l.c.l., same basis lb. .25½- —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt alld E. of Denver lb. .46¼- —
non-ret. dms., l.c.l. frt. alld. E. of Denver lb. .47¼- —
tanks, frt. alld E of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd E lb. .51½- —
dms., l.c.l., dlvd E. lb. .52½- —
tanks, dlvd E. lb. .49 —
Tri-isopropanolamine, dms. c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E lb. .24¼- —
tanks, dlvd. E. lb. .20¾- —
Trimethylamine, 25-40% soln. dms., c.l., works, frt equald., 100% basis lb. .35 - —
dms., l.c.l., works, frt. equald., 100% basis lb. .35½- —
tanks, works, frt. equald, 100% basis lb. .26 - —
Trioxane pure, dms. c.l. t.l. works. lb. .50 - —
dms. l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., l.c.l., dlvd. E. lb. .35 - —
Triphenyl phosphate bbls. c.l., frt. equald lb. .41½- —
bbls., l.c.l., frt. equald lb. .43½- —
Triphenylguanidine bbls. works lb. .90 - —
tanks, same basis lb. .18½- —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .21 - —
dms., l.c.l., l.t.l., frt. alld E lb. .22 - —
Tripropylene glycol, tankcars and compartmented tankcars, frt. alld. E lb. .18½- —
tankwagons and compartmented tankwagons, 1,000 gals. min. frt. alld E lb. .19 - —
Tripropylene glycol prices 1c per lb higher in West
Trisodium phosphate (see Sodium phosphate tribasic)
dl-Tryptophane, fib. dms., works. lb. 55.00 - —
Tung oil, dms., c.l., New York lb. .23½- —
dms., l.c.l., New York lb. .23¾- .24
tanks, New York lb. .22 - —
tanks, domestic mills lb. .21 Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 3.73 - —
Tungstic acid tech. dms 1,000-lb lots, works lb. 2.15 Nom.
dms., smaller lots, works lb. 2.30 Nom.
Turkey red bbls. works lb. .62 —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 - .50
Tyrothricin USP bots gram .55 - .58
Tuscan red, bbls. frt. equald lb. .26 - .32

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 - .39½
Ultramarine blue, jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., l.c.l., works lb. .07¾- .08
Burnt, Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms lb. 1.45 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust. bgs., c.l. t.l. dlvd E ton 125.00 —
bgs. l.c.l. dlvd E. ex whse ton 145.00 - —
45% N, agricultural, bgs., c.l. (30 tons) dlvd E ton 110.00 - —
Urea-ammonia liquor A and B grades, N basis, tanks, Belle W Va ton 126.00 - —
C grade, tanks, same basis ton 124.50 - —
37 grade, tanks, same basis ton 153.00 - —
Urethane USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls. lb. .17 - .19

V

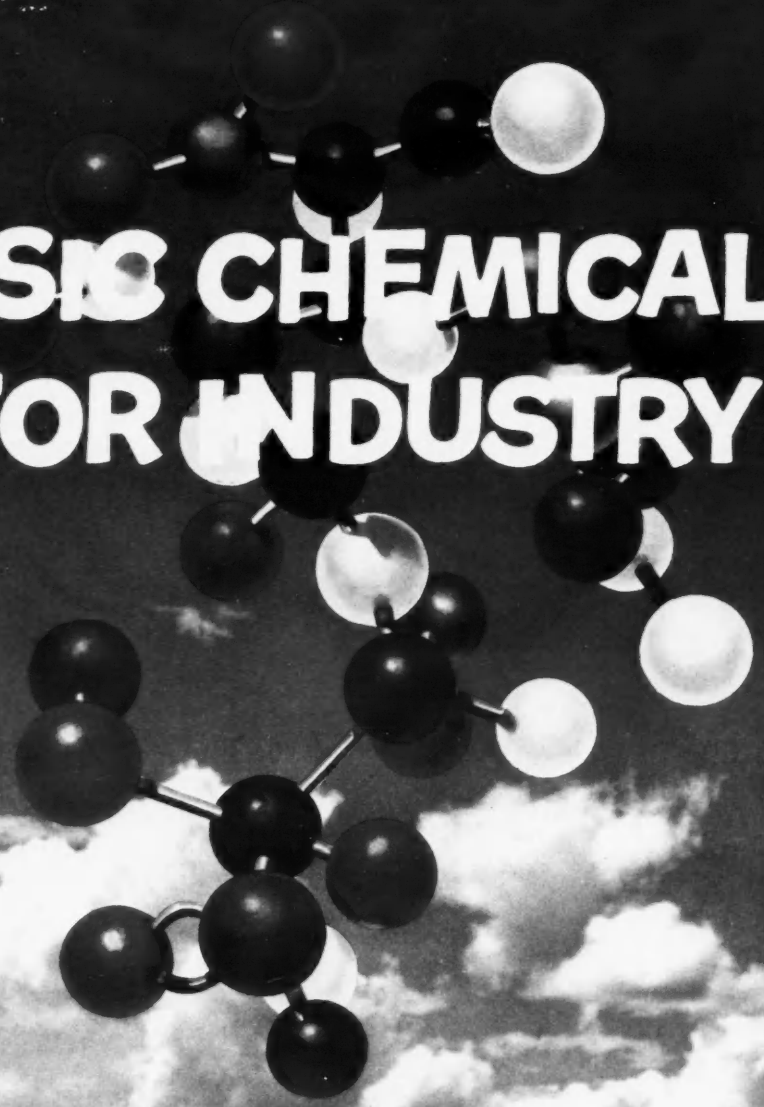
Valerian root, Belgian, bgs. lb. .35 - —
Indian, bgs lb. .29 - —
dl-Valine, dms., works lb. 21.00 - 27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton. 88.00 - 90.00
Valonia cups, 28-30% tannin, bgs., ex dock ton. 66.00 - 67.00
Valonia extract, powd. 63% tannin, bgs., ex dock lb. .11 - —
Vanadium pentoxide, tech. dms., works lb. 1.28 - 1.33
Vandyke brown, bbls. works lb 09½- 12
Vanilla beans, Bourbon, tins lb. 9.00 - 9.75
Mexican, cuts, tins lb. 9.25 - 9.75
whole, tins lb. 9.50 - 10.00
Tahiti, cs lb. 7.50 - —
Vanillin ex lignin, 100-lb fib dms., 1,000-lb. lots or more lb. 2.85 - 3.10
100-lb fib dms., smaller lots. lb. 2.95 3.10
Venetian red, jobbing, bgs., works. lb. .0475- —
20%, bgs., works lb .0525- —
25%, bgs., works lb .0575- —
30%, bgs., works lb 06 - —
35%, bgs., works lb .0625- —
40%, bgs. works lb .0675 - —
Vetiver oil, Bourbon, cns lb. 13.00 - 15.50
Haitian, cs. lb. 10.00 - 11.50
Java, cns lb 11.75 - 12.25
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - —
Victoria blue toner bbls. prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb .20 - —
55-gal dms., l.c.l., dlvd lb .21 - —
tanks, dlvd lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Vinyl acetate monomer, zone 2, 55-gal. dms., c.l., dlvd. lb. .21 - —
55-gal. dms., l.c.l., dlvd lb. .24 - —
tanks, dlvd lb. .18½- —
tanktrucks less than 4,000 gals., dlvd lb. .19 - —
Zone 1 is all continental U. S. except Zone 2. Zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works lb. .11 - .13
Vinyl ether, tech. dms., c.l., works. lb. .26 - —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
USP, anesthesia, bots. 50cc. hospitals bot. 1.12 - —
USP, anesthesia, bots. 7.5cc. hospitals bot 1.56 - —
Vinyl ethyl ether, tech., dms., c.l., works lb. .29¼- —
dms., l.c.l., works lb. .30 - —
tanks, works lb. .27¼- —
l.c.l., works lb. .50 - —
Vinyl methyl ether cyls. works lb .30 —
Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made
Vinyl propionate, monomer dms., c.l., dlvd lb. .49½- —
dms., l.c.l., same basis lb. .50½- —
tanks, same basis lb .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms to tanks, works lb. 1.34 - —
1 to 9 dms., works lb. 1.48 - —
tanks, works lb. 1.31 - —
Vinyltoluene, dms., c.l., frt. alld. lb. .16 - —
dms., l.c.l., frt. alld lb. .18 - —
tanks, frt. alld lb. .13½- —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units 02½- —
Virginia type red, bbls. works lb 1.40 - —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, syn., dry, 500,000 units per gram, kilo lots kilo. 67.50 - —
dry, 325,000 units per gram, same basis kilo. 43.88 - —
dry, 250,000 units per gram, same basis kilo. 33.75 —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin A, palmitate, liq 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
Liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast)
Vitamin B_{12} cryst., 1-10 gram vials. gram 215.00 - —
Oral grade solids, in containers of 1 and 10 grams of B_{12} activity gram 175.00 - —
0.1 percent triturations of cryst B_{12} with dicalcium phosphate or mannitol 1-10 kilo. 247.00 - —
Vitamin C (see Ascorbic acid)
Vitamin D (see Codliver and Fish-liver oils. Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo. 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K, 25 gram bots gram 4.50 —
Violet methyl toner (see Methyl violet toner)
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root, bark, bls lb. 2.10 - —
Warfarin 0.5%, dms., 50-lb. lots, dlvd lb 1.95 - —
dms. 25-49-lb lots, New York or Chicago lb 2.05 - —
ens., 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds, bbls lb 1.95 - —
Wattle bark, fair average, African, bls, ex dock ton. 68.00 - —
Merchantable, bls., ex dock ton. 64.00 - —
Wattle extract, liq., 35% tannin, bbls. lb. .08¼- .08½

ORONITE®

BASIC CHEMICALS FOR INDUSTRY



ORONITE CHEMICAL COMPANY

A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY

ORONITE

Description and application

ALKANE* detergent intermediate

From the early days of synthetic detergents to today's market of well over 3 billion pounds—Oronite ALKANE has remained the world's leading detergent raw material. ALKANE is an alkyl aromatic which is readily converted into the highest quality syndets—liquid or dry, household or industrial.

Oronite is also foremost in providing technical assistance on detergent processing—continuous or batch processing, oleum or SO_3. Oronite can supply technical assistance and complete information on building or adapting existing plants for the processing of ALKANE. This service includes drawings, flow diagrams and suggested plant equipment as well as technical service on plant operation and product control. Write for technical bulletin giving you the complete ALKANE story.

SURFACE ACTIVE AGENTS

SLURRY. Detergent intermediate in paste form—easily processed into liquids or dry detergents in flake, granule, bead or powder form. Widely used as a wetting agent, emulsifier, emulsion breaker and flotation reagent.

D-40* and D-60*. Dry detergents used "as is" or with builders for cleaning, wetting, dispersing or foaming. Widely employed in household cleansers, washing products, pre-cast concrete products, fire fighting, textile, leather and ore processing, air pollution control and in surface coatings. Available in three particle sizes—granules, flakes and powder. Write for D-40 "use" bulletin.

DISPERSANTS NI-E, NI-O, NI-W. NI-E is an oil-soluble, liquid nonionic used in formulation of dry cleaning detergents and for emulsification applications where a water-in-oil type emulsifier is required. NI-O is slightly more hydrophylic and has similar application. NI-W, liquid nonionic, is used for compounding heavy duty household and industrial detergents, liquid dishwashing products, metal cleaners, sanitizers, rug cleaning, textile and leather processing compounds, agricultural chemicals, insecticides, polishes and cosmetics.

ISOPHTHALIC

This Oronite Chemical Company "first" is proving to be the most important new raw material for the paint and plastics industries in the past half century.

Isophthalic is a white crystalline product similar to phthalic anhydride in appearance but differing markedly in physical properties and reaction characteristics. Isophthalic forms all three types of esters. Simple esters for plasticizers; complex esters for alkyd resins and high molecular weight; linear polymers necessary for films and fibers.

Paint formulas—industrial, interior and exterior architectural paints and baking finishes—developed from Isophthalic-based resins are becoming the talk of the paint industry. Long-sought-after improvements in paints—better color and gloss retention, faster "quick-dry" and "through-dry", superior flexibility, hardness and impact resistance, better resistance to film checking and cracking, excellent non-yellowing properties, better adhesion to metal surfaces, tougher, longer lasting films—all can be obtained from Oronite® Isophthalic.

For plastics—polyesters, polyamides, polyester-amides, reinforced plastics of unsaturated polyester types and for plasticizers—Isophthalic materially improves products as well as presenting opportunities for new products.

There is good evidence that Isophthalic resins produce epoxy strengths at polyester prices. Reinforced plastics, of unsaturated polyester type—that withstand higher temperatures that can resist more flexing, that have greater impact strength, that have better adhesion to glass—are now possible with Oronite Isophthalic. Such a serviceable material, which can meet your cost requirements, opens up new horizons and new applications, as well as offering improvements in present plastics products.

Ask your paint or resin supplier about Isophthalic, or contact any Oronite office and let us prove to you how Isophthalic can benefit your products.

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Litho in U.S.A.

# of versatile Oronite products

ORONITE

PHENOL, U.S.P.

Oronite as a phenol source offers you two important advantages. (1) Consistent high-quality phenol is assured from the unique cumene manufacturing process. (2) Oronite is the only phenol producer in the U. S. with complete control of raw materials and manufacturing from start to finish—using its own petroleum stocks as raw material. Such a basic source doubly assures you of a most dependable supplier for high quality phenol.

To best serve Eastern and Mid-Western phenol users, Oronite has bulk distribution terminals available at key consuming points. Customers are quickly served by tank car, tank truck or with drum shipments.

Oronite® Phenol is a basic chemical for plastic molding powders, adhesives for the plywood industry, lube oil additives, and as an intermediate for manufacturing other chemicals. Get the Oronite Phenol story.

PHTHALIC ANHYDRIDE

In 1945, Oronite Chemical Company began the world's first production of phthalic anhydride from ortho-xylene, a petroleum derivative. Through the years Oronite® phthalic anhydride has been considered the standard of quality in alkyd and polyester resin manufacture, in plasticizer production and in organic synthesis. And because of Oronite's affiliation with one of the world's largest producing and refining oil companies—petroleum stocks are always in assured supply for production of phthalic anhydride.

Quick delivery of Oronite phthalic anhydride, in molten or flake form, is made from bulk storage terminals in close-by Eastern and Mid-Western centers. Oronite phthalic anhydride is a basic ingredient in paints, plastics, pigments and a host of other products, and Oronite is the sole supplier of petroleum-derived P.A.

POLYBUTENES

Oronite® polybutenes are synthetic polymers, chemically inert liquids nearly water white in color. They are available in seven different grades, varying from moderate to very high viscosity and tackiness. They do not become gummy or waxy and do not harden, darken or change in any essential property over long periods of atmospheric exposure. Ideally suited in preparation of sound deadening, insulation and calking compounds; as a dielectric in high voltage cables, condensers and capacitors; as an ingredient in the manufacture of pressure sensitive adhesives and leather goods. Write for technical data; product samples are also available.

XYLENE INTERMEDIATES

Meta-Xylene 95%—Para-Xylene 98%—Ortho-Xylene. Oronite was the pioneer and is today the leading producer of xylene isomers — the only source offering all three isomers in commercial quantities. *Meta-Xylene* offers many opportunities in the production of pharmaceuticals, dyestuffs, polyesters, perfume ingredients and fine chemicals. *Para-Xylene* is used as an intermediate to manufacture synthetic fibers and films. *Ortho-Xylene* is used as an intermediate for making phthalic anhydride and other chemicals. Write for further information on properties and data on typical tests.

ACETONE

Oronite cumene process Acetone is a colorless, fragrant, flammable liquid that more than complies with the ASTM requirements. Used as a vehicle in nitro-cellulose lacquers, varnishes, rubber cements and in the manufacture of rayon, celluloid and cellulose acetate plastics. Also a solvent, cleaning agent and extracting medium. Purity is 99.5% minimum; typically 99.8%.

GAS ODORANTS

Oronite manufactures and markets a complete line of odorants to meet all safety requirements of the natural and liquefied petroleum gas industries. Since marketing of the first gas odorant in 1927, Oronite has been a major producer and leader in gas odorization. Oronite odorants include: Calodorant® C, a completely stable cyclic sulfide odorant; Calodorant® C Special, blend of Calodorant C and solvent; Calodorant® B-1 and the new Calodorant® F, sulfide odorants at mercaptan prices; Alert® 80, best economy-priced, quality mercaptan; Ethyl Mercaptan, a high quality pure mercaptan for LP gas; LPG odorant, tailor-made from a selected mercaptan cut. Send for Oronite's comprehensive Gas Odorant technical bulletin.

LUBE OIL ADDITIVES

Oronite is considered the preferred source for oil and grease additives which reduce wear and increase performance of aircraft, gasoline or diesel driven automotive equipment. Oronite will formulate to a customer's exact needs and specifications; will provide "complete-performance" formulations, or will furnish special performance additives.

Various Oronite additives improve base oils by providing: detergent-dispersion action, resistance to oxidation, rust and corrosion protection. They give reduced engine wear and cleanliness under low temperature operation. New Oronite "60" Series additives are specially designed for today's high-powered gasoline engines and "stop" and "start" driving conditions. Other advanced Oronite additive products include a new automatic transmission fluid and a new gelling agent for producing superior grease lubricants.

The research and testing facilities behind Oronite additives are the most advanced in the nation. A leading manufacturer of petrochemicals, Oronite has the experience and facilities in oils and chemicals to consistently produce the finest additive products—assuring you dependability, maximum performance and fair prices. It will pay you to get the Oronite additive story.

HIGH TEMPERATURE HYDRAULIC FLUIDS

After several years of research and development, Oronite is now offering high temperature hydraulic fluids 8515 and 8200. These non-petroleum based silicate ester fluids are finding wide acceptance in supersonic aircraft and missile applications. Low vapor pressure and constant viscosity in addition to desirable electrical properties indicate many potential uses in other applications. Contact any Oronite office for additional information and the new technical bulletin.

OTHER ORONITE PRODUCTS

Butadiene. Polymerization grade, 98% minimum purity. Used as component in certain synthetic rubbers and latices.

Fuel Oil Additives. Mixed with diesel, furnace and jet oil fuels to stabilize against deterioration, sludge formation and for preventing corrosion in presence of water.

Maleic Anhydride. White crystalline product used in manufacture of synthetic resins, paints, dyes and plastics.

Metallic Naphthenates. Used as preservatives for cellulose products against attacks of bacteria, fungi, wood parasites and marine organisms.

Hydrogenation Catalyst. Used in de-sulfurization process to remove sulfur, nitrogen and metals from petroleum feed stocks.

TECHNICAL ASSISTANCE. Oronite's philosophy on technical service is that of translating product research data to your individual needs. Oronite recognizes that each raw material application is different but that helpful supplementary assistance can be provided on an individual basis. When a company becomes an Oronite customer, technical service continues—providing the customer new data as developed, suggesting ways of cutting costs, cooperating in every way possible to make your association with Oronite more valuable. Why not call Oronite and see for yourself the depth of our technical assistance on your problems. Our wide experience as a leading petrochemical source is at your disposal.

ORONITE CHEMICAL COMPANY
A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Tulsa, Los Angeles, San Francisco, Seattle
Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama

Wattle extract, solid, East Africa, 60% tannin, bgs., ex dock lb. .08275- —
Solid, South Africa, 60% tannin, bgs. ex dock lb. .0840- —

Waxes

Wax quotations, formerly grouped under one heading, are now listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. gal. 12.25 • —
Wheat starch (see Starch, wheat).
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb. .18 • .19
White precipitate, USP powd. dms., lb. 6.55 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls. lb. .18 • —
thin, rossed, bls. lb. .21 • —
Wintergreen oil, USP, nat., northern, cns. lb 6.35 -10.30
USP, nat., southern, cns. lb. 3.75 - 4.10
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. lb. .16 • .17
Witch hazel leaves, bls. lb. .22 • —
Wollastonite, fine, bgs., c.l., works, ton 39.50 • —
bgs., l.c.l., ex whse ton 56.00 • —
Medium, bgs., c.l., works ton 27.00 • —
bgs., l.c.l., ex whse ton 44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant, bgs. lb. 4.25 - 4.50
Wormseed oil (see Chenopodium oil, NF).
Wormwood oil, cns. lb. 4.90 - 5.80

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. gal. .33 • —
Birmingham dist. gal. .32 • —
Chicago dist. gal. .34 • —
Cleveland dist. gal. .34½- —
Geneva, Utah gal. .29 • —
Johnstown, Pa. gal. .33 • —
Lackawanna, N. Y. gal. .34 • —
Lone Star, Tex. gal. .31¼- —
Lorain, Ohio gal. .33 • —
Middletown, Ohio gal. .34 • —
Minnequa, Colo. gal. .34 • —
Philadelphia dist. gal. .33 • —
Pittsburgh dist. gal. .32 • —
Sparrows Point, Md. gal. .33 • —
Terre Haute, Ind. gal. .34 • —
Youngstown, Ohio gal. .32½- —
Xylene, petroleum indust., tanks, works:
Bayonne, N. J. gal. .33 • —
Baytown, Tex. gal. .31¼- —
Charleston, S. C. gal. .33 • —
Chicago, Ill. gal. .34 • —
Houston, Tex. gal. .31¼- —
Philadelphia, Pa. gal. .33 • —
Providence, R. I. gal. .33 • —
Wood River, Ill. gal. .34 • —
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works lb. .23 • —
Cryst. 56°-59° C. m.p. dms. l.c.l., works, frt. equald lb. .33 • —
60°-62°C. m.p., dms., l.c.l., same basis lb. .40 • —
Xylenol fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis gal. 1.25 • —
dms. l.c.l. same basis gal. 1.30 • —
tanks, same basis gal. 1.05 • —
Xylenol fraction, b.r. 7-9°C., dry at or below 227°C., dms., c.l., same basis gal. 1.35 • —
dms., l.c.l., same basis gal. 1.40 • —
tanks same basis gal. 1.15 • —
Xylidines, mixed o-m-p, dms. c.l., or t.l., works lb. .39 • —
dms., l.c.l. same basis lb. .40 • —
tanks same basis lb. .38 • —

Xylol

Xylol quotations, both coaltar and petroleum, may now be found under Xylene.

Y

Yara yara oil, cns. lb. 2.15 - 2.75
Yeast, brewers, debittered, USP, Saccharomyces dlvd lb. .27 • —
Dry, USP, 50 Int'l B units per gram, 100-lb dms lb. .47 • —
90 Int'l B units per gram, 100-lb. dms lb. .52 • —
200 Int'l B units per gram, 100-lb dms lb. .6 • —
300 Int'l B units per gram, 100-lb dms lb. .60 • —
Torula, USP, dlvd lb 18 • —
Yerba santa leaves, bls. lb .49 • .43
Ylang-ylang oil, Bourbon, bots lb 19.00 -25.00

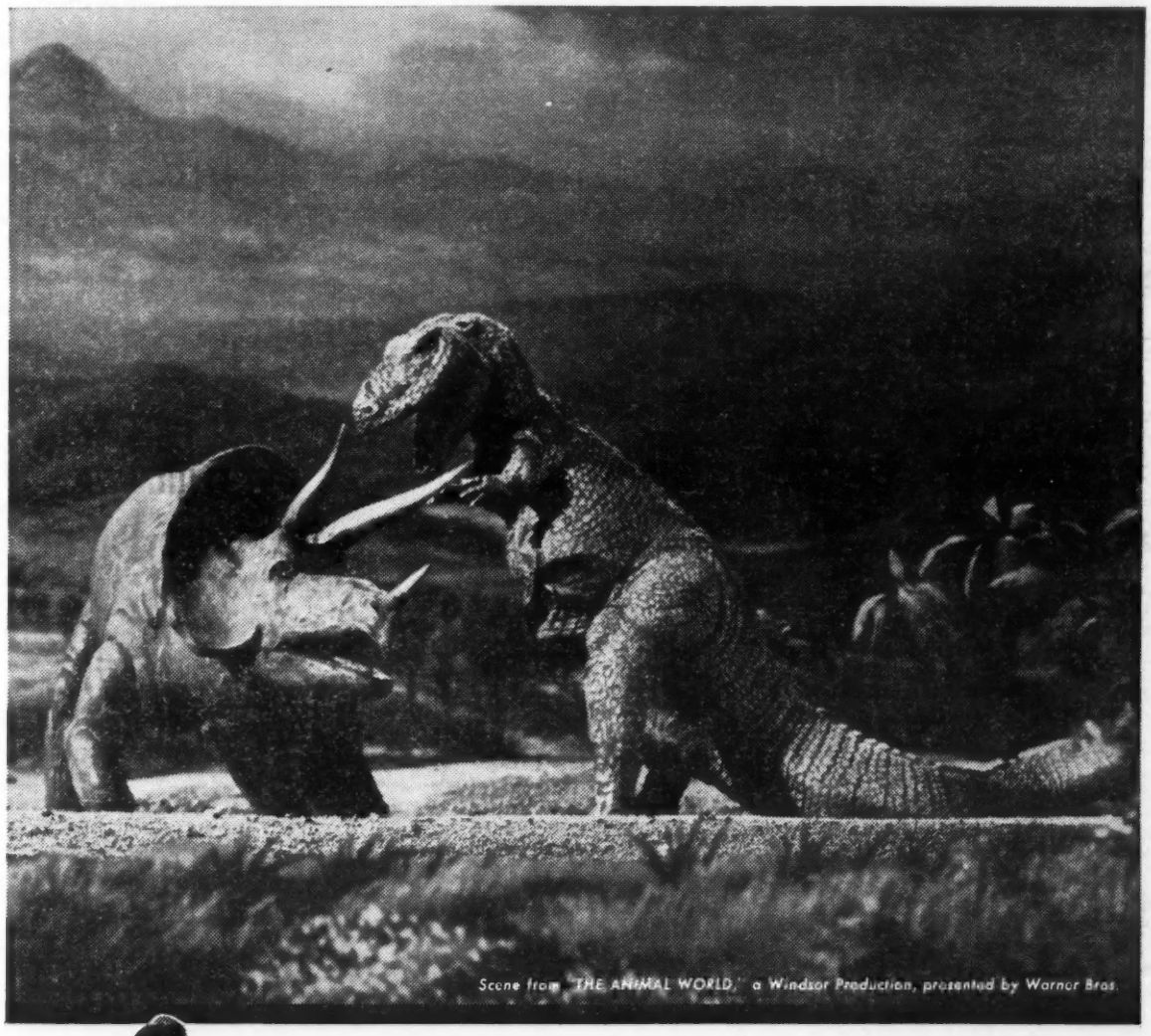
Yellow Pigments

Yellow pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Ylang-ylang oil, Bourbon, extra, bots lb. 28.00 -40.00
Madagascar, bots lb. No Stocks.
Yohimbine hydrochloride, bots, tins, oz. 3.75 4.25

Z

Zein, bgs., 36,000-lb. lots or more, lb. .38 • —
bgs., 1,000 to 36,000-lb lots, works, lb. .40 • —
bgs., smaller lots, works lb. .43 • —
Zinc acetate, NF, VIII, dms. lb. .53 • —
Tech., dms., l.t.l., works lb. .29¾- —
Zinc borate, bgs., c.l., dlvd. E lb. .192 • —
bgs., l.c.l., dlvd. E lb. .203 • —
Zinc chloride, NF, gran., dms. lb. .42 • —
Precip., powd., dms. lb. .26 • —
Soln., 50%, dms., c.l., works, 100 lbs. 5.80 • —
dms., l.c.l., works 100 lbs. 6.40 • —
tanks, works 100 lbs. 5.15 • —
Tech., fused, dms., c.l., works, 100 lbs. 10.70 • —
dms., l.c.l., works 100 lbs. 11.20 • —
gran., fib. dms., c.l., works, 100 lbs. 11.45 • —
fib. dms., l.c.l., works 100 lbs. 11.95 • —
Zinc chromate, bbls., dlvd. lb. .29 • —
Basic, bbls., dlvd. lb. .34 • —
Zinc cyanide, dms. 1,000-lb. lots or more, works lb. .55 • —
dms., smaller lots works lb. .57 • —
Zinc dust, coml., bbls., c.l., works lb. .1360- —
Pigment, bbls., c.l., works lb. .14 • —
bbls., l.c.l., works lb. .15 • —
Zinc fluoride, bbls., works lb. .49 • .50
Zinc hydrosulfite, dms., c.l., frt. alld. lb. .21½- —
dms., l.c.l. frt. alld. lb. .23½- —
Zinc metal, prime western slabs, E. St. Louis lb. .10 • —
Prime western, slabs, New York, lb. .10½- —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld. lb. .27 • —
10% Zn. dms., frt. alld. lb. .33 • —
Zinc nitrate, tech., cryst., bbls., works lb. .20 • —
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld lb. .14½- —
bgs. l.c.l., same basis lb. .15½- —
leaded, 35%, bgs., c.l., mills, frt. alld lb. .15½- —
bgs., l.c.l., same basis lb. .16½- —
50%, bgs., c.l., same basis lb. .15⅞- —
bgs., l.c.l., same basis lb. .16⅞- —
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld lb. .15¾- —
bgs., l.c.l., same basis lb. .16¾- —
red seal, bgs., c.l., same basis, lb. .15¼- —
bgs., l.c.l., same basis lb. .16¼- —
white seal, bgs., c.l., same basis lb. .16¼- —
bgs., l.c.l., same basis lb. .17¼- —
USP, ctns., c.l., frt. alld. lb. .17¼- —
ctns., l.c.l., same basis lb. .18¼- —
Zinc oxide Pac Coast prices 1c higher.
Zinc phenolsulfonate, NF, gran., dms. lb. .44 - .45
NF, powd., dms. lb. .47 - .48
Zinc resinate, precip. 7.2-7.6% Zn, dms., frt. alld. lb. .36¼- —
Zinc silicofluoride, dms., works lb. .12½- .14
Zinc stearate, tech., USP, ctns., c.l., lb. .41 • —
Zinc sulfate, powd., monohydrate, ctns., l.c.l. lb. .42 • .46
36% Zn., bgs., c.l., dlvd, E 100 lbs. 8.75 • —
bgs., l.c.l., dlvd. E 100 lbs. 9.75 • —
USP, gran., dms. lb. .26 • —
Zinc sulfate in bbls. 40c. higher.
Zinc sulfide, pure, bgs., c.l. dlvd lb. .2530- —
Zinc undecylenate, dms. lb. 2.00 • —
Zinc yellow (see Zinc chromate).
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 • —
bbls., c.l., works 100 lbs. 10.85 • —
bbls., l.c.l., works 100 lbs. 11.35 • —
Zinc-formaldehyde sulfoxylate basic, dms., c.l. lb. .25½- —
dms., l.c.l. lb. .26 • —
Zircon (G), gran., bgs., c.l., works, lb. .03¼ —
bgs., 5 tons to c.l., works lb. .03⅜- —
bgs., 1 ton to 9,999-lb. lots, works lb. .04 —
bgs., smaller lots, works lb. .06½- —
milled, bgs., c.l., works lb. .04½- —
bgs. 5 tons to c.l. works lb. .04⅝- —
bgs., 1 ton to 9,999-lb. lots, works lb. .04⅝- —
bgs., 500-1,999-lb lots works lb .07½- —
Zircon (G) in barrels 1c higher
Zirconium acetate, 13% soln., ZrO, c.l., 30,000 lbs minimum, works lb. .23 • —
Zirconium hydride powd., dms., works lb. 7.25 9.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works lb. 1.50 • —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works lb. .45½- —
bgs. smaller lots, works lb. .48 • —
milled, bgs., c.l., works lb. .59 • —
bgs., 5-ton lots, works lb. .59½- —
bgs., 1-ton to 9,999-lb. lots, works lb. .60 • —
bgs., 500 to 1,999-lb. lots., works lb. .60½- —
bgs., smaller lots, works lb. .63 • —
Glass polishing grade, 94-97% ZrO_2, bgs., works lb. .55 • .65
Opacifier grade, 85-90% ZrO_2, bgs., lb. .27 • .50
Stabilized oxide, 91% ZrO_2, milled, bgs lb. .62 • .85
Zirconium oxychloride, cryst., cns., 5-ton lots, works lb. .35½- —



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Volume 173 **May 19, 1958** **No. 21**

Some Ideas on Tax Relief

It has come to look as though there will be no general application of federal tax easement, even as a tranquilizer, in connection with the attempted remedying of the national business indisposition. The Secretary of Commerce has reported that a poll of the sixty-four members of his department's Business Advisory Council found their sentiment to be three-to-one against "any emergency anti-recession tax cut." A special unit of the council, which has been studying the recession from various angles and with various purposes, has called for a hold-the-line tax policy.

There is, however, among the members of the council at large and among interested top members of the federal administration, including the Secretary of the Treasury, a strong feeling that some tax relief should be provided. The prevailing sentiment in that respect is said to favor liberalization of depreciation allowances for business, which the Secretary of Commerce says everybody feels would be a "real curative for the economy, a real help," and for at least spot reductions in excises and some measure of alleviation of the tax burden of small business.

Some of that is good; some is not. The advocates of liberalization with reference to depreciation present as their objective the encouraging of industry to modernize and expand plant facilities. Beyond that, they have in mind a general expansion of productive capacity. But, impartial economists are advising against such expansion until the effectiveness of distribution capabilities has been brought up to what is still needed satisfactorily to handle what can now be produced. It might be much better to give business a more liberal allowance on its costs of selling.

That, quite naturally, brings up the subject of increasing—or at least stimulating—buying power by reductions in personal taxes, including exemption for what is spent for food and clothing.

It would help business in various ways, especially in the cloudy areas of railroading, if the wartime emergency excises were removed from transportation. It would do good very broadly if they were taken off gasoline, handbags and the like, and cosmetics, substantially reduced on products of tobacco and alcohol and other consumable goods, and somewhat on automobiles and other capital goods.

A brand-new idea in connection with the need for relief from federal-tax reduction of incomes was set forth earlier in the present month by the president of the Advertising Federation of America, who charged that a gag was being placed upon business's freedom of speech by the Internal Revenue Service in its enforcement of a new regulation "which does not permit a private power and light company to charge off for income tax purposes advertising costs which are incurred in presenting competitive arguments on government entry into the electric power business." That puts a wholly new supplement on that old query which never has satisfactorily been answered—Why is business not allowed to deduct for tax purposes what it must spend as dividends, taxable for the recipient, as the cost of one of its most necessary supplies—capital?

Russia Plans Chemical Supremacy

The Soviet Union is doing a far more successful job commercially than politically in its steadily progressing infiltration of the other countries of the world—whatever may be the "free" status thereof. For that reason, there is strong, somewhat distasteful food for much thought and more action in the recent declaration by its prime minister that plans to put a vast investment into the development of a broadly serviceable chemical industry over the coming eight years. The chemical area is one of the more important in which the Soviet Union plans to "surpass the United States in per capita production," and thereby raise the living standards of its people. Its ultimate objective, the prime minister has said, is to extend communism throughout the world by force of example, not of armament.

Under the chemical plan, the primary Soviet objective is declared by the prime minister to be the launching or expansion of at least 250 plants in that eight-year period and the staffing of them at all levels with "imported" personnel if necessary, in order that its people would get all the advantages of unlimited production of plastics, synthetic textiles, and everything in the field of industrially applied chemistry that they need and want.

In the development of the world's largest chemical industry—and the spreading of communism—the Soviet chief said that he would be willing to place big orders in the United States, Great Britain, West Germany, and elsewhere for the latest and best equipment—thus demonstrating among other things, as he puts it, that communism desires to do all that it can to provide employment for deserving workers in all countries.

It is the stated opinion of top officials in Washington that there is no reason why the Soviets could not buy many, if not all, types of chemical industrial equipment in this country under authorizations which could readily be extended by the Department of Commerce. The prime minister's reference to the "importing" of foreign scientific and technical personnel has been said to have a probability of involvement of some responsibility on the part of the Department of State—if proposed with reference to this country.

With respect to both equipment and personnel, there is a big question of what would be the attitude and reaction of the chemical industry of this country—and a bigger question of what it could do about such a move here It must be recognized that the Soviet chemical project has been officially tied in with communistic ideologic promotion. It is to be inferred that profit would not be a primary motive, at least in the earlier years of the undertaking—campaign, propaganda, or whatever. It is also to be expected that, in the further cultivation of popular relations, especially in South America and Africa, there would be a strong promotion of bartering of Soviet chemicals for the natural mineral resources of those continents—not so much for importation into Russia, which is quite rich of itself in that respect, but for Soviet selling throughout the world as a most potential contributor to that basically purposed extension of communism commercially, socially, and politically into all parts of the world, by way of a more or less permanently balanced scheme of reciprocity.

Business Dieting Advocated

It was seven weeks ago today that the finance committee of the United States Senate was told by a broadminded, deep-thinking observer-appraiser of economic facts that "it would be an inspiring and salutary thing if the leaders of our great labor unions and business would jointly pledge to the President that for one year there will be no increase in wages or prices and that profit margins would at least be frozen."

Ten days ago, a group of seven leaders in national areas of business constituting the anti-recession committee of the Department of Commerce's Business Advisory Council, reporting in response to a request by the Secretary of Commerce, made the following recommendation:

"The committee recommends that President Eisenhower call for a voluntary, one-year moratorium on further wage increases by labor and on corresponding price increases by business."

The parent council passed the recommendation to the cabinet officer for relaying to the President.

When the so-called "Baruch plan" was presented to the senate finance committee, the President told his press conference: "I have talked about this certainly indirectly and adverted to this subject time and again . . . . I read a great deal of his testimony and I found he covered the field pretty widely. And I have respected his opinion over the years, as most of you know."

That makes the President's position on the matter quite clear. But, he should get the joint pledge suggested in the plan. He should not be required to call upon either management or labor to volunteer not to lay any heavier cost burden upon the already overburdened consuming public. That volunteering should be wholly voluntary. It would be better all around for business than the recently popularized "buy now" price-cutting. It would do more good for labor in the long run than would any of its currently proposed "pay-us-more-so-we-can-buy-more" schemes, and certainly, unlike those, do good for every other buyer—and seller. It would result in more jobs for automobile workers than could reasonably be expected from their leader's suggestion that some sort of an arbitration group determine how much more they could be paid without boosting the price of automobiles.

It would be a very good thing for this country and its people if it had what the President had in mind when he said, "I believe that there has got to be business leadership and labor leadership, that are exercised, if a free economy is going to operate successfully over the years." But, as things are, what is the answer? Somebody, properly representative of the people, should have full power to order that one-year freezing of pay and prices at current levels—and should fully exercise that power now.

Washington Talks It Over

Riverside Chemical Plants Keep Eye on Relief Legislation For Railroads—Fear Rate War Between Ships, Trains.

By Ralph L. Cherry
Chief, OPD Washington Bureau

Chemical industry plants located along the waterways and largely dependent upon the river transports for supply movements have an important interest in the financial plight of the railroads and the efforts now planned to alleviate the situation, if the fears expressed by the water carriers are well founded.

One of the planks in the platform for aiding the railroads is an easing of the controls over setting of rates. The aim is to allow the carriers to set the rates on a competitive basis and this, say the barge line operators, will mean only one thing—disastrous rate wars between the railroads and water carriers with the water carriers and the industries depending on their low cost transportation being the losers in the end.

There are eight parts to the program for aiding the railroads. Besides a more lenient rate-making plan, the program also calls for financial aid from the federal government in the form of guaranteed loans for new equipment. The barge lines have informed congress that they are willing to support seven of the eight proposals, but to give the railroads rate making authority without consideration of its effect on other modes of transportation, they say, is tantamount to repeal of the 1940 transportation policy of regulating the common carriers to preserve the inherent advantages of each.

ICA Pushing Guaranty Program

International Cooperation Administration is launching a new push to get more American firms interested in opening up new enterprises abroad. The agency is circularizing the thousands of recipients of its small business memos, pointing out the benefits of its investment guaranty program.

Through this program, American foreign investments can be protected against certain political or non-business risks: (1) inconvertibility, (2) expropriation and confiscation, and (3) war damage.

Thirty-seven countries have signed agreements with the US to institute the guaranty program. The fee is usually ½ of 1 percent of the coverage per annum. Guaranties are available for new investments or additions to old investments—small or large—for a period up to twenty years.

The present drive is aimed at arousing the interest of small American firms in the program. Point is made of the fact that the program covers such things as licensing agreements which include management technics, patents, know-how, services, etc., which ordinarily involve very little direct cash outlay.

Benson Wants Better Cotton

Secretary of Agriculture Benson is urging cotton farmers to grow more high quality cotton, and therein lie some possible new sales leaders for producers of agricultural chemicals. To produce high quality cotton, seven important steps should be followed, three of which depend on aid from the agricultural chemical producers.

Says Secretary Benson: using the best seed available for a recommended variety, treat the seed with a good fungicide. Then fertilize to fit needs by fertilizing at the rates, time and manner recommended by the experiment station. Thirdly, manage the crop for quality by controlling weeds, insects and diseases.

There is one note of caution sounded by the secretary in connection with fertilization. He warns that where there is the temptation to apply nitrogen at excessive rates (200 pounds N per acre and more), the grower should be mindful of possible consequences to grade. Such treatment of solid stands may delay maturity and contribute to an increase in the percentage of spotted cotton.

An Answer to Weeds

Department of Agriculture scientists have found one possible solution to the problem of how to combat weeds in crop areas without injury to the growing crops. The answer may be herbicides in granular form.

Recent experiments have demonstrated the possibilities of this method of application. Scientists found that granular herbicides remain in contact with crop foliage only momentarily before reaching the soil where they are needed to keep emerging weed seedlings. Since this momentary contact does the foliage little or no harm, herbicides that are highly injurious to crops in spray form may, under some conditions, be used in granular form with safety.

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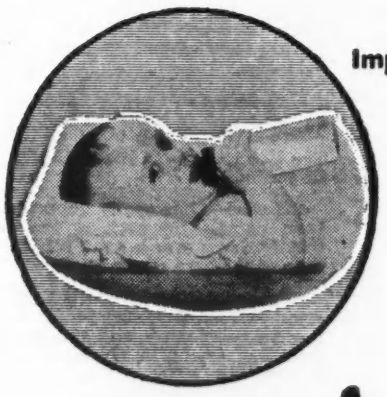
Increasing interest among MDs

The value of pyridoxine is receiving increased attention from physicians. The symposium on "Newer Vitamins" held under the auspices of the National Vitamin Foundation at Vanderbilt University summarized research work and pointed the way to new fields of investigation. As a result, doctors and diet experts are giving more study to the importance of the vitamin to health and nutrition.

Metabolic imbalance in pregnancy

Pyridoxine's particular place in the metabolism of tryptophane and other amino acids may be significant in correcting certain metabolic imbalances known to exist in some pregnancies.



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Packaging—Polyethylene bags sealed with saf-t-tag. In ½ and 1 kilo tamperpruf metal containers. Larger quantities in fibre drums; small in amber, screw-cap bottles.
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Heavy Chemicals

Sewage treatment grade ferric chloride has been raised 25 cents per hundred pounds on spot. The higher price will go into effect July 1 on contract. There has been a seasonal upturn in inquiry for water and sewage treatment chemicals, including aluminum sulfate, copper sulfate, ferric chloride and chlorine. On the export market, dry grades of caustic soda were increased, while light and dense soda ash declined.

Weakness in the lead market forced a reduction in pig lead. Platinum declined a dollar. Mercury gained a little strength. Heavy chemical business in general continues to show barely perceptible improvement. This has been the case since the beginning of April. Since May 1, the tempo of buying has shown spotty increases.

The mild upturn in steel production since the first of May has made itself felt to a minor degree in the mineral acid business. Sulfuric acid sales, while not by any means up to last year's par, nonetheless were believed to be improving.

Observers feel that the future welfare of the acid market, as well as for chemicals in general, hinges largely on the automobile industry.

There have been encouraging signs of uptrends in new construction of housing, and boosts in machine tool orders, but unless the auto industry shows new life in the near future, it is felt, the chemical business will continue at about present levels.

Calcium chloride ordering by maintenance departments for dust control has picked up rather belatedly, owing to recent heavy rains in many areas of the country.

Lime plant operations continue to sputter along, and little improvement is expected before the fourth quarter. Magnesium output in 1957 was the highest since 1953, but bauxite consumption declined to some extent during the year.

The American Paper and Pulp Association reported production for the week ended May 10 at 88.3 percent of theoretical capacity, as compared with the revised figure of 89.2 percent for the previous week, and 95.8 percent for the corresponding week of last year.

Acids

Battery—Carboy carlot quantities were firmly priced at $2.35 per 100 pounds. In less than carlot carboy quantities, prices ranged from $2.65 all the way up to $10.95 depending upon quantity ordered. The high cost of accommodating an order for single carboys was such that most producers placed a high price on them to prevent losing money on such orders.

Hydrochloric—Definite, if minor, improvements in sales have been noted for this acid since the beginning of May. On the whole, the market was judged in better condition than most business in general.

Hydrofluoric—In terms of volume, this acid hasn't done too badly since the first of the year. However, it was generally felt that business was not up to last year's corresponding period.

Stainless steel demand for HF was not too good considering normal takings. However, it was better than the condition of the carbon steel industry.

Glass etching inquiry has been holding up well. As for refrigerants and propellents, producers know that sales have been pretty good so far—but they are currently in the dark as to whether this year will be better than last.

The Bureau of Mines, in its latest check on fluorspar, says that domestic production in 1957 was 315,300 tons. Shipments of 310,500 tons were valued at $14,969,400.

Biggest item is total fluorspar consumption. It set a record during '57, reaching 639,500 tons, an increase of about 10 percent above 1956.

The hydrofluoric acid industry consumed 328,672 tons of fluorspar in 1957, as against 289,523 tons in 1956. From this acid grade fluorspar, the industry produced 84,796 tons of acid on a 100 percent HF basis.

Of all the fluorspar used during '57, some 631,400 tons were imported.

Price Trends

Advanced

Ferric chloride, sewage grade, 25c. per cwt.
Mercury, $1 per flk.

Reduced

Lead metal, ½c. per lb.
Platinum, $1 per oz.
Tin, ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
104.68	104.68	104.81	104.40

For Current Prices See Page 9

Sulfuric—There has been a moderate increase in demand, particularly since May 1. This is due in part to a barely perceptible increase in steel production.

The rayon industry has shown steady inquiry. Demand for high tenacity tire cord has been active. Staple and tow consumption has been unspectacular.

There are some guesses in the industry that fertilizer consumption this year will be about 10 to 12 percent below last year's level. If this is the case, sulfuric will suffer accordingly.

Steel production should have reached 1,400,000 tons last week, according to the American Iron and Steel Institute. This is higher than the 1,334,000 tons, or 49.4 percent of capacity reached the previous week.

Actual output a month ago last week was 1,285,000 tons; actual production a year ago last week was 2,155,000 tons.

Bases and Salts

Calcium Chloride—Ordering is now beginning for dust control on secondary roads during the summer. There has been some delay during the past several days due to extraordinarily wet weather, particularly in the east.

The rain has delayed road grading operations in many areas. Hence, deliveries against contracts have been a little slow in starting, since calcium chloride applications begin only after grading and leveling are finished, and the roads are reasonably dry.

Caustic Soda—On May 15, export prices on solid rose to $3.25 per cwt., and flake prices were boosted to $4 per cwt., f.a.s. The rise was due in part to higher domestic prices.

Chlorine—Only spotty improvement has been noted. However, it was conceded that business was a good bit better now than at the turn of the year.

Copper Sulfate — Output in March dropped to 3,472 tons, 17 percent below the February level and the lowest level since January, 1956, according to the Bureau of Mines.

Shipments increased 17 percent, to 5,855 tons and were greater than production. Stocks declined 13 percent, to 4,760 tons, and at the March rate of shipments were sufficient for little more than a month's needs.

Lime—Little change in lime plant operations has been noted in the past month. The national average is estimated at about 70 to 75 percent of capacity.

Those plants located in areas where steel is a determining factor are operating as low as 40 to 50 percent of capacity. Little, if any change is anticipated by the trade for the third quarter.

Soda Ash—There has been little change in either light or dense ash demand during the past few weeks. Business has improved from year-end levels, however.

Last week on the export market, dense ash declined to $1.90 per cwt.; and light, to $1.85 per cwt., f.a.s. Atlantic and Gulf ports. The reduction was attributed to oversupply.

Ferric Chloride—A producer has boosted sewage grade on spot to $4 per cwt., anhydrous basis, f.o.b. works, in tank trucks or tankcars. Contract price will go into effect July 1.

Potassium Silicate—Price patterns long in effect, remained unchanged, and were expected to hold for the months immediately ahead. The clarified grades,

Heavy Chemicals

marketed as electrical or electronic grades, used in TV tube manufacture were quoted at $6.15 per 100 pounds in tankcars f.o.b. producing plant. This price level represents material of 30° Be, with a ratio of 1:20.

The 40.50° Be material of 1:2.1 ratio, not clarified, moved in tankcars at $5.60 per 100 pounds. The 29° Be material of ratio 1:2.5 was priced in tankcars at $4.60 per 100 pounds. The usual differential of 35 cents per 100 pounds for 30 drums or more, over tankcars prevailed. Quantities of from to 29 drums was priced at $1.10 per 100 pounds over the tankcar price.

Sal Ammoniac—Gray material in carlot quantities was priced at $8.25 per 100 pounds in carlots on a freight equalized basis. Less than carlot bag quantities ranged from $8.65 to $12.65 depending upon quantity.

Sulfur—The following figures, compiled by the Bureau of Mines, represent production, shipments and stocks of sulfur of a purity of 97 percent or greater during specified periods in the United States, in tons:

	March	*Feb.*
Native production	429,475	415,186
Shipments	444,349	313,753
Sales*	429,134	334,778
Stocks†	4,620,947	4,620,606
Recovered production	51,104	49,174
Shipments	52,612	46,922
Sales*	51,435	46,729
Stocks†	163,462	163,793

* Calculated from production and change in stocks during the period.
† Producers' stocks at mines or plants in transit, and in warehouse at end of period.

The following figures, compiled by the Bureau of Mines, show imports of Mexican sulfur into the United States during specified periods:

Long Tons	*Jan.*	*Dec.*
Ore	3,350	.....
In any form	32,569	77,047
Total	35,919	77,047
Dollar Value	*Jan.*	*Dec.*
Ore	$78,626	.....
In any form	737,340	1,752,542
Total	$815,966	$1,752,542

Nonferrous Metals

Aluminum — Total bauxite consumption in 1957 was 7.6 million dry long tons, a slight decrease from the 1956 level, according to the Bureau of Mines.

Domestic bauxite output during the year reached 1.4 million long tons, a decrease of 19 percent from 1956. Total new supply for consumption rose to 8,518,000 tons.

Copper — Metal was held at 25c. per pound by primary producers last week. Custom smelters continued to price copper at 23¾c. per pound, delivered US destinations.

Lead—Metal declined ½c. per pound last week, to 11.3c. per pound East St. Louis, and 11½c. per pound, New York basis.

Magnesium — Output during the first quarter of 1958 was 12,033 tons, some 8,658 tons below the first quarter of 1957, according to the Bureau of Mines.

Mercury—Metal was quoted last week at $229 to $232 per flask, spot.

Platinum—Metal was lower last week, at $64 to $70 per troy ounce, spot.

Silicon—A producer lowered prices last week in price cuts ranging from $5 to $40 per pound, depending on type. New prices range from $155 to $355 per pound for semi-conductor grade and $90 per pound for solar cell grade.

When the first semi-conductor silicon was introduced in 1952, it sold at $430 per pound.

Silver—Bullion was listed at 88⅝c. per troy ounce, spot on Friday, unchanged.

Tin—Metal lost fractionally, and was quoted Friday at 94½c. per pound, spot.

Zinc—The following figures, in tons, indicate total slab zinc smelter output and stocks according to American Zinc Institute.

Production	*April*	*March*
Special high grade	26,303	27,920
High grade	8,015	8,010
Intermediate	1,316	1,408
Prime western	34,580	34,936
Total	70,214	72,274
Stocks	*April*	*March*
Special high grade	69,314	58,364
High grade	14,743	12,647
Intermediate	6,174	6,423
Prime western	130,940	126,207
Total	221,171	203,641

Justice Dept. Says 3 Miles Is Limit for Off-Shore Land

The Justice Department filed a brief with the Supreme Court of the United States last week arguing that the Gulf states' rights to off-shore oil lands are limited to inside the three mile line.

The department contended that the supreme court can decide the off-shore boundaries of Florida, Louisiana, Texas, Mississippi and Alabama, without taking testimony. According to the government's brief, the defendant states are limited to the national boundary which at all relevant times has been three miles from the coast.

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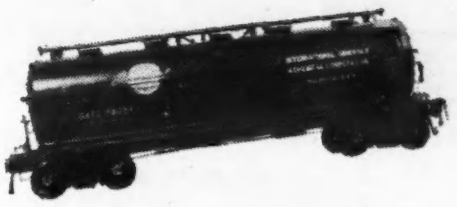
FOR A OR A 

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Hyper-Pure Silicon Cut As duPont Opens Plant

E. I. duPont de Nemours & Co., has lowered prices for all grades of hyper-pure silicon, coincident with the start-up of what is reported to be the nation's first full-scale silicon plant, near Brevard, N. C.

According to Dr. J. B. Sutton, specialty products sales manager for the Wilmington, Del., company's pigments department, reductions range from $5 to $40 per pound, retroactive to May 1. They begin with a listing of $320 per pound for semiconductor No. 1 in needle form, as compared to an old price of $360.

When duPont pioneered production of semi-conductor silicon in 1952, the price was $430 a pound. Solar grade silicon sold for $190 per pound when introduced in 1956.

Trade Agreement Extension

—Continued from page 7

mission recommendations in escape clause cases.

Drawn up by minority leader Joseph Martin of Massachusetts, a two-thirds vote of both the house and senate can override the president when he refuses to follow the recommendations of the comsion.

The other important change to be made in the law is to provide additional standards in the national security clause requiring consideration being given not only to maintaining the health of essential industries, but also their continued growth, and to change the procedural provisions so that the Office of Defense Mobilization will have greater responsibilities in protecting essential industries.

Democratic and administration leaders are hopeful of getting the bill considered on the house floor under "gag" procedures that will bar the offering of anything but committee approved amendments. If the protectionist groups can prevent adoption of the gag rule they plan to offer a substitute extension resolution for the consideration of the house.

The proposal was introduced last week by Richard M. Simpson of Pennsylvania in association with Reps. James C. Davis of Georgia, Cleveland M. Bailey of West Virginia and William J. Dorn of South Carolina.

It provides for a two year extension of the trade agreement act and places final responsibility in congress for determining tariff and trade policy. It also spells out the legal requirements for use of import quotas when reasonable tariffs are not enough to prevent serious injury to a domestic industry.

Mr. Simpson said that the measure is designed to meet the needs of such industries as chemicals, textiles, pottery and glassware and others important to national security. Changes proposed in the national security clause, he added, will be of material assistance to the fluorspar, petroleum, copper, lead, zinc, and tungsten industries.

Nuclear Corporation Reduces

—Continued from page 4

$150 per gram to $15. High-purity oxdes of thulium, europium, and neodymium fell 80 to 85 percent. Most of the other reductions came in the prices of "medium" lots, which in this industry means 100 to 1,000 grams, but one-gram to ten-gram lots also were reduced substantially.

Nuclear Corporation also announced that terbium oxide and holmium oxide of 99.8 percent minimum purity now are available for the first time. Previously, only 98 percent purity could be guaranteed. The company now can supply all rare-earth oxides at 99 percent purity or better.

In addition to oxides, price reductions were announced for rare-earth chlorides, nitrates, fluorides, sulfates, and acetates.

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Data Offered

Olin Mathieson Chemical Corporation, New York, has outlined more than a dozen organic chemicals in a twenty-eight page booklet issued by its organic chemical division. The booklet also gives shipping information, sales office addresses and the physical properties and commercial applications of the chemicals. Some of the chemicals covered are **glycols —ethylene, diethylene, triethylene and polyethylene — glycol ethers, ethanolamines and surfactants.** Copies may be obtained by writing to Olin's organic chemicals division, 1 Park avenue, New York 16.

Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation, describes **eleven organic chlorine compounds** in a forty-five page booklet just published. The booklet details physical and physiological properties, use information, shipping regulations, handling and storage and specifications and test methods for the compounds described. The materials discussed are ethylene dichloride, "Chlorasol" fumigant and solvent, propylene dichloride, trichlorethane, butyl chloride, 2-ethylhexyl chloride, dichlorethyl ether, dichloriso-propyl, triglycol dichloride, ethylene chlorhydrin and epichlorhydrin. Copies are available from Union Carbide at 30 East 42nd street, New York 17.

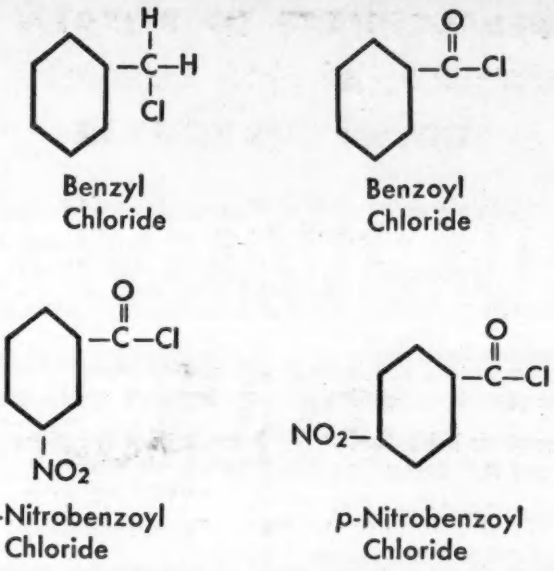
Dow Chemical Company, Midland, Mich., has issued a booklet detailing the reactions and uses of **allyl alcohol.** According to the booklet, allyl alcohol is used as an intermediate in the production of such products as resins, pharmaceuticals, flavorings and perfumes. It functions primarily as an intermediate for such esters as allyl isothiocyanate, diallyl phthalate, allyl caproate and allyl methacrylate. The booklet is available by writing to the technical service and development department of Dow at Midland.

Becco Chemical Division, Food Machinery & Chemical Corporation, Buffalo, N. Y., has issued two technical information bulletins detailing the properties and suggested uses of two new **diepoxides:** dicyclopentadiene dioxide, described in Bulletin 95, and limonene dioxide, described in Bulletin 96. The two diepoxides are expected to find their principal use as constituents in epoxy and other resin systems where they can function as diluents, crosslinking agents or modifiers of resin properties. Copies of Bulletins 95 and 96 and samples of the new chemicals may be obtained by writing to Becco Chemical Division, Food Machinery & Chemical Corporation, Station B, Buffalo 7, N. Y.

Nalge Company, Rochester, N. Y., has issued a twenty-page catalog of its **plastic laboratory ware.** Included are descriptions and pictures of the company's complete line of laboratory containers and equipment.

American Cyanamid Company, New York, has issued a thirty-six page booklet entitled **"This Is Cyanamid."** The booklet traces the company's development through its fifty year history, explaining its relationship with the medical, industrial, farm and consumer markets. Separate sections are devoted to the company's production facilities, its foreign operations, research activities and personnel.

Eastman Chemical Products, Inc., Kingsport, Tenn., a subsidiary of Eastman Kodak Company, has issued a brochure on the use of **isobutyl acetate in lacquer solvent systems.** Included are comparisons of isobutyl acetate with the other principal medium-boiling solvents, n-butyl acetate, sec-butyl acetate and methyl isobutyl ketone. Copies of the brochure are available upon request from Eastman Chemical at Kingsport.



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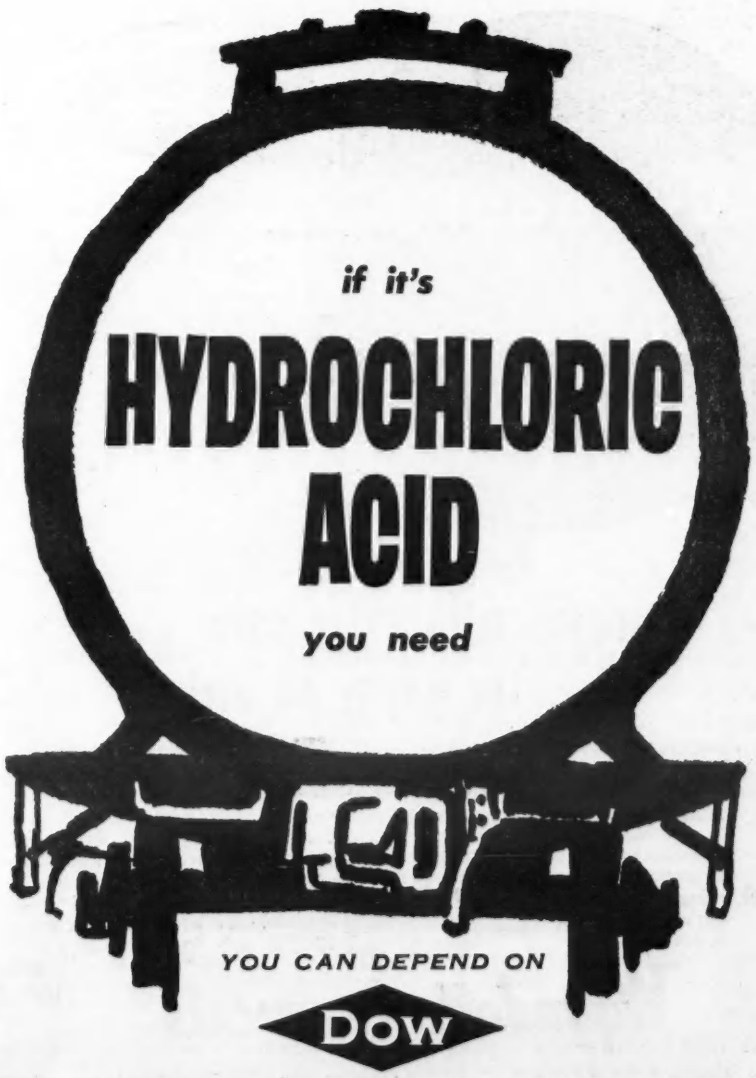

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Obituaries

Kenneth T. Price

Kenneth T. Price, a vice-president of Freeport Sulphur Company, New York, died May 11 in Port Sulphur, La. He was fifty-five years old.

Mr. Price joined Freeport in 1925 as an engineer in its plant at Hoskins Mound, Tex. He was named vice-president in charge of the Louisiana producing operations in 1952.

Arthur Larkins, industrial paint sales representative for Suydam Division of Pittsburgh Plate Glass Company, Pittsbugh, Pa., died recently in Cleveland, Ohio. Mr. Larkins was associated with the paint industry in various capacities for the past fifty-seven years.

Lucien Lelong, French couturier and perfumer, died May 11 in Biarritz, France. He was sixty-eight years old.

Edmond E. Lincoln, retired economic consultant to E. I. duPont de Nemours & Co., Wilmington, Del., died May 14 in that city. He was ninety-one years old. Dr. Lincoln retired in 1953 after twenty-two years with the company.

Merritt K. Ross, hospital sales manager for Ciba Pharmaceutical Products, Inc., Summit, N. J., died in that city on May 11. He was fifty-four years old. Mr. Ross joined Ciba in 1948.

P. L. Tremblay, eastern division manager of Shell Oil Company of Canada, Ltd., a subsidiary of Shell Oil Company, New York, died on April 29. He was forty-nine years old.

Research Will Be Curbed By Heavy Taxes: Driscoll

Heavy taxation by government on pharmaceutical laboratories will curb basic research. This, according to Alfred E. Driscoll, president of Warner-Lambert Pharmaceutical Company, Morris Plains, N. J., is one of the pressing problems facing pharmaceutical research today.

With the spotlight turned on the drug industry because of recent discoveries with mass medium application, Mr. Driscoll says, the tendency may be to "cut open the goose that has been laying the golden eggs."

"The industries' right to make a fair profit margin," Mr. Driscoll says, "is crucial." Another way government may hamper research is "an attempt to replace the present system of multiple independent teams of researchers with some super-organized national research scheme." This, he added, "would choke off the virility of our research from the start."

Jefferson Lake Selling

—Continued from page 5

existing plant will place the company in a favorable position to supply the requirements of the sulfur markets of western Canada and the Pacific northwest of the United States, it is said.

In exchange for its assets, rights and undertakings in Canada, Jefferson Lake Sulphur, based in New Orleans, La., is to receive 1,425,000 of the 2,025,018 initially issued shares of the company. The sulfur inventory being sold to Jefferson Lake Petrochemicals by Jefferson Lake Sulphur consists of the entire production (estimated at 25,000 long tons) of the latter company's Peace River plant since January 1.

Jefferson Lake Sulphur expects to retain 1,400,000 (about 69 percent) of Petrochemicals' shares; will provide executive management for the company at reasonable compensation; and will contract to market the company's sulfur for a sales fee of $1 per long ton sold.

Petrochemicals made the disclosure in a registration statement filed with the Securities and Exchange Commission covering 600,000 shares of its $1 per common stock and warrants to purchase 60,000 additional common shares to be offered for sale to the public.

Michigan Chemical Fills Market Research Position

Michigan Chemical Corporation, Saint Louis, Mich., has appointed Everett E. Klicker as market research manager.

Mr. Klicker will assist H. Stanley Lawton, vice-president of sales and development, in extending the markets for the company's basic chemicals and their derivatives. Mr. Klicker formerly was sales and development manager of the rare earths and thorium division of Michigan Chemical.

Mr. Klicker was employed six years by International Minerals & Chemical Corporation, where he served as product manager in a chemical sales department.

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Textile, Leather Chemicals

Business continued spotty in textile and leather chemicals last week. While business lacked volume, prices were unchanged and well held for the entire list. Chemicals moved in fair volume against existing contracts, while new business was confined to actual needs. Siamese tapioca flour was quiet and unchanged, while Brazilian was inactive and easy for shipment. Potato starch was unchanged and steady, despite limited consumer demand. Tanning materials were quiet. Wattle bark was unsettled and replacements declined $4 per ton. Other materials were unchanged.

April shipments of acetate yarn and rayon (i.e. the cellulosic man-made fibers except acetate staple + tow) by producers totaled 71,000,000 pounds, a decline of 7,900,000 pounds or 10 percent from the March level of 78,900,000 pounds and 19½ percent below April, 1957 shipments, according to the Textile Economics Bureau. Shipments amounted to 69,900,000 pounds to domestic consumers and 1,100,000 pounds for export.

Imports of rayon staple into the United States in February amounted to 5,268,000 pounds, a decline of 23½ percent from the 6,876,000 pounds in January. For the first two months of the year, imports aggregated 12,144,000 pounds, off 34½ percent from the comparable 1957 figure of 18,598,000 pounds. Imports of non-cellulosic man-made staple in February were 525,000 pounds compared with 115,000 pounds in January.

Rayon staple imports during 1957, totaled 83,830,000 pounds, of which 31,903,000 pounds or 38 percent were carpet-type staple and the remaining 51,927,000 pounds were regular rayon staple. In 1956, carpet staple imports totaled 26,957,000 pounds or 29½ percent of the total of 91,752,000 pounds of rayon staple imported. West Germany was the major supplier of carpet staple in both these periods.

Chemicals

Bichromates — Consumers continued to limit purchases to prompt needs. Prices were maintained at current levels. Withdrawals against contracts moved in fair volume.

Hydrogen Peroxide—Demand was restricted to actual needs. Quotations were without change.

Sodium Acetate—Trading was confined to immediate needs. Market was unchanged and fairly steady.

Sodium Hydrosulfite—Demand was limited to prompt requirements. Prices were well held at prevailing levels.

Sulfonated Oils—Activity was limited to actual needs. All varieties were quotably unchanged.

Sizing Materials

Albumin Egg—Buying interest was fair, with trading chiefly for immediate delivery. Market was steady. Flake was held at $1.22 to $1.24 per pound and powder, $1.26 to $1.28 per pound, spot, as to quantity. Technical ruled steady at $1.08 to $1.10 per pound, same basis.

Corn Starch — Demand was moderate and continued to prompt delivery. Prices were maintained at current levels. Pearl was held at $7.38 per 100 pounds, paper bags, carlots, New York basis and powder, $7.50. Less carlots were 15c. higher. Visible corn supply was boosted 355,000 bushels to 94,452,000 bushels for the week ended May 9, against 128,805,000 bushels for the corresponding week last year according to the Chicago Board of Trade.

Egg Yolk—This market was unchanged and steadier, with the higher egg market. Demand was spotty. Prices were unchanged from $1.31 to $1.33 per pound, spot, as to quantity.

Egg production in April was indicated at 5,495 million compared with 5,458 million in March; 5,680 million, April last year and 10-year average of 5,849 million.

Potato Starch—Demand was moderate, chiefly for prompt needs. Prices were unchanged and steady. Carlots were maintained at 6½c. per pound, f.o.b. Maine, with no discount, while Idaho starch was available at 6.35c., carlots, less ½c. for delivery to eastern points. Stocks on spot were in fair demand and held at 8¾c. to 9¼c. per pound, exwarehouse, as to quantity.

Price Trends

Advanced
None

Reduced
Wattle bark, $4 per ton

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
101.79	101.85	102.80	105.30

For Current Prices See Page 9

Production of the late Spring potato crop was reported at 29,287,000 hundredweight compared with 30,104,000 last year and 26,538,000 for the 10-year average.

Sago Flour—Buying interest continued limited to actual needs. Light stocks on spot were quotably unchanged. Raw was quoted at 7c. to 7¼c. per pound, exwarehouse, as to quantity and refined, 9c. to 9¼c., same basis. Singapore flour for shipment was quoted at 5½c., carlots, exdock, prompt.

Tapioca Flour — Trading in replacements was reported light. Siamese flour was unchanged and steady, while Brazilian was unsettled and offered more freely. Siamese medium was quoted at 5.45c. per pound, carlots, exdock, prompt shipment and Brazilian at 6¾c., same basis, with trading noted at a shade lower. A grade was quoted around 7c., same basis.

Tanning Materials

Shoe output in March was placed at 51,955,000 pairs by the Department of Commerce, about 3,000,000 below output a year ago, bringing production for the first quarter to 153,900,000 pairs, or a decline of 2.4 percent from the first quarter of 1957. For the month, youths' and boys' and women's sandals and playshoes were the only types to show an increase in output from a year ago: output for the remaining types was smaller than last year with slippers, total women's, and children's shoes declining less than the drop in total production. The percentage of shoes with all or part leather uppers and leather soles in the March was slightly lower than a year ago.

Factory shipments were closely in line with production. During the first three months, however, shipments have exceeded production by 1,359,000 pairs while a year ago the excess amounted to 486,000 pairs. The average value of shoes shipped in March was $3.50 per pair as compared to $3.58 in the previous month and $3.60 per pair a year earlier.

Chestnut Extract—This market was quiet. Shipments were maintained at unchanged quotations. Solid extract, 60 percent tannin was held at 8.727c. per pound, carlots, exdock, prompt shipment and 68 percent powdered 9.817c., same basis.

Cutch—Shipments were held at 7½c. per pound, carlots, exdock, prompt shipment. Consumer interest was light.

Mangrove Bark—Trading was slow and market was more or less nominal. African bark was quoted at $64 to $65 per ton, exdock, prompt shipment. Columbian was nominal at $50 per ton, and Ecuadorian, $47, same basis.

Myrobalans—Business was spotty and confined to nearby shipment. Quotations were without change. Genuine J1's were quoted at $59 to $60 per ton, exdock, for prompt shipment; crushed J1's at $73 to $74, and Bombay, at $52 to $53 same basis.

Quebracho Extract — Spotty demand continued for actual needs. Shipments were unchanged and well held. Solid clarified 64 percent was held at 10.8713c. per pound, carlots, exdock, prompt shipment and solid ordinary at 9.9228c., same basis.

Wattle—An easy tone continued in bark replacements and prices were reduced $4, per ton. Buying interest was slow. Fair average was quoted at $68 per ton, exdock, prompt shipment and merchantable, $64, same basis. Extracts were unchanged. African 60 percent was held at 8.275c. per pound, and South African at 8.4c., carlots, exdock, prompt shipment.

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Methanol Makers Hoping Heavy Planes, Short Runways Will Bolster Market

OPD Special Report on Methanol (CH_3OH)

—*Continued from page 3*

tion's 16-million-gallon plant at Pensacola, Fla.

In every instance where a methanol unit was built in 1957, it was an effort by each company involved to get basic or expand in a product it needed for its own use.

In the case of Rohm & Haas, it requires methanol for production of methyl acrylates and methyl methacrylates at Houston. Celanese put its expansion through as part of an overall plant expansion for methanol and formaldehyde.

Escambia's Reasoning in Building

Escambia in constructing its plant banked heavily on Reichhold Chemicals, Inc., White Plains, N. Y. It hoped that RCI, with which it has a marketing agreement, would consume most of the methanol turned out at Pensacola.

Hercules erected an installation because it makes formaldehyde, pentaerythritol and related materials. But the Hercules decision not to go ahead with its methacrylate project means that there will be a lot more methanol to sell on the open market.

On top of this, the washout of merger plans between Reichhold and Catalin Corporation of America presents still another marketing poser. It had been estimated that an RCI-Catalin consolidation would absorb a huge quantity of Escambia's methanol.

With an increase in industry capacity from 275 million gallons in 1957 to 313 million gallons in 1958 and a decline in open-market sales, the situation, to the thinking of practically everybody in the industry, promises to become quite sloppy.

This large excess capacity has been one of the chief reasons in recent weeks for price-cutting sentiment. Not to be overruled is the price slash administered to formaldehyde by E. I. duPont de Nemours & Co., Wilmington, Del., amounting to more than 16 percent.

Formaldehyde is by far the chief consumer of methanol and a sharp slash in prices for HCHO in a recession-plagued market has methanol marketers on the alert.

Right now, methanol expansion appears to be at a standstill. DuPont had been considered among the expanders, but the company said last week that while it plans to expand, it is not going to at present.

Olin Seems Likeliest Firm to Expand

Olin Mathieson Chemical Corporation, New York, seems the most likely, and perhaps the only, company to announce expansion in methanol before the year is out.

Recently, Olin revealed that it had given up on its Morgantown, W. Va., plant, which is rated at a capacity of 18 million gallons annually. The company is supposed to close down the facility at midyear (OPD, 3/31/58).

Olin's disclosure was of some cheer to the methanol industry because, as a consumer, the company's requirements for CH_3OH are estimated in the neighborhood of 7 million gallons annually.

But Olin is working on plans right now for new production, and has no intention of getting out of methanol. The company is currently putting a large portion of its Morgantown output into storage, so that its own needs can be satisfied, at least for a time.

After midyear, when Olin closes down its plant, capacity will be in excess of 295 million gallons. If and when Olin jumps right back in with another plant, capacity could jump over the 300-million-gallon mark again.

Compare this figure with actual 1957 production—213.6 million gallons. And the prospects are that 1958 output will not equal 1957.

Looking through the end-use pattern, the only startling development in the methanol picture during the past few years has been use of water-methanol injection in aircraft—in both piston and turbine engines.

Right now, the most promising—and most perplexing—end-use for methanol is obviating needs for any sort of booster fluid such as a methanol-water mixture.

So the air force's needs can be expected to decline over the next few years. That the decline has already set in can be shown in these figures:

In 1955, the air force is said to have taken 20 million gallons; in 1956, 17 million; in 1957, 15 million. And the Topeka, Kans., procurement office estimates that '58 requirements won't quite reach 14 million gallons.

What Happens to Air Force Methanol?

What happens to the methanol consumed by the air force? The B-47's—there are still more than 1,600 of them—operate on 650 pounds per second of water-methanol mixture, increasing thrust by 22 percent on take-off.

It can be assumed that these bombers won't be thrown on the scrap heap en masse. The B-58 will probably replace them gradually. An indication is the slow decline in methanol orders.

The methanol consumption picture in ADI fluid. An idea of possible consumption can be gained by noting that a Douglas DC-6 burns from four to six gallons of methanol per take-off. An air force B-47, it is estimated, consumes 200 gallons of methanol per engine per take-off.

The reason the market is so perplexing is that it is difficult to estimate civilian aviation requirements: some planes use methanol injection (for instance, the DC-6 and the Vickers Viscount) and some do not.

A researcher is faced with the problem of multiplying gallons per engine per take-off per year, times all the take-offs made from all the commercial airfields.

This might be done easily, but then there is the problem of figuring overseas flights. Abroad, in many instances, ethanol is cheaper than methanol, and it can be used just as easily.

Civilian Aviation Needs Hard to Figure

Requirements for civilian aviation, then, are difficult to determine. Estimates from various industry sources vary considerably—there are guesses ranging up to 10 million gallons annually. To most, however, this figure is high, and they feel that 7 million gallons would be closer to the mark.

Air force needs are much easier to figure. Last year 15 million gallons were taken. The lion's share of methanol used by the air force goes into the B-47.

What has the methanol industry biting its nails now is that the B-47 is already obsolescent, and is to be replaced by the B-58, which is said to require no methanol. The B-52 does not use methanol.

And it won't be too long before bombers fueled with boranes will be taking over, looks a bit more hopeful in the civilian aviation field. But there are still a number of intangibles which methanol market researchers are trying to figure out in attempting to arrive at a clear picture of future needs.

By mid-1956, some 242 passenger jets had been ordered by various airlines. The number has gone up sharply since then. Deliveries are scheduled to begin late this year and continue indefinitely.

Enter the Boeing 707 Jet Transport

An eye-popping feature about the possibilities for methanol in this market is that the Boeing 707 jet transport, for instance, is said to consume between four and five tons of water-alcohol mixture per take-off. The mixture's proportion is estimated at 28 percent methanol and 72 percent water.

What's the reason for using water and methanol in commercial airliners of the future? Short runways. It boils down to whether the airlines are prepared to lengthen runways to 10,000 feet in every commercial airport, or shorten take-off distance with ADI fluids.

For example, in the B-47, use of an ADI hypo reduces ground distance on the take-off by some 2,000 feet. The methanol-water injection system also may be a solution to the problem that commercial transports have in taking off during hot weather from high altitude fields.

Knowing the future potential is there, the industry's chief trouble at the moment seems to be to determine how much.

This concentration of attention by methanol producers on this one end-use—ADI fluids—is perhaps an outgrowth of industry disappointment over many other consumption areas.

Take a look at formaldehyde, for instance. HCHO has long been the bellwether among methanol consumers, taking in excess of 40 percent of overall production of methanol annually.

But in the last couple of years, things haven't looked too bright. Formaldehyde production jumped from 1.2 billion pounds in 1955 to 1.4 billion pounds in 1956, but tailed off to 1.3 billion pounds in 1957. Chances are that output will take a considerable dip in 1958.

In 1957, it is estimated that methanol consumption for use in formaldehyde reached 75 million gallons. Methanol used for inhibiting HCHO totaled about 6 million gallons.

A significant factor is that methanol used in formaldehyde in 1957 represented about 38 percent of total methanol production—pretty much the same as in 1953.

In the past five years, producers of methanol continually expected formaldehyde to take an increasing share of total output. So far, at least, this has not happened.

A quick look into formaldehyde's end-use pattern reveals some disturbing facts. Phenol-formaldehyde resin output is expected to decrease, bowing to other resins in a good many applications.

What's worse is that urea-formaldehyde and melamine resins makers are not doing much business these days, chiefly due to the current economic slump. Plywood sales, for instance, are not good at present, and urea-formaldehyde glues are off accordingly.

Cocking an eye at the future, phenol, urea-formaldehyde and melamine resins are seen bucking increasingly stiff competition from thermoplastic resins. The latter are expected to make enough of an encroachment on the thermosetting resins field to retard overall growth significantly. This, in turn, will hinder the growth of formaldehyde.

Slow Growth Seen in Resins

U-F and melamine resins are expected to grow. It's anticipated that phenol-formaldehyde resins will remain static, or even decline, during the next few years. This means that formaldehyde requirements in the resin field can be expected to grow—but slowly.

Pentaerythritol takes a goodly share of total formaldehyde output—about 16.3 percent in 1955, for instance. But its biggest outlet in turn is alkyd resins.

Alkyds are now facing fierce competition in the paint field from acrylic and polyvinyl acetate paint latices, to men-

—*Continued on page 41*

WHO'S WHO IN SYNTHETIC METHANOL PICTURE

A Rundown of Producers, Their Plants and 1958 Capacities

Allied	South Point, Ohio	16 million gals./yr.
Celanese	Bishop, Tex.	15 million gals./yr.
CSC.	Sterlington, La.	40 million gals./yr.
DuPont	Belle, W. Va.	11 million gals./yr.
DuPont	Orange, Tex.	90 million gals./yr.
Escambia	Pensacola, ~~Tex.~~ Fla	16 million gals./yr.
Gulf Oil	Conroe, Tex.	0.6 million gals./yr.
Hercules	Louisiana, Mo.	7 million gals./yr.
Heyden-Monsanto	Texas City, Tex.	25 million gals./yr.
Olin Mathieson	Morgantown, W. Va.	18 million gals./yr.
Rohm & Haas	Houston, Tex.	12 million gals./yr.
Spencer	Military, Kans.	8.5 million gals./yr.
Union Carbide	South Charleston, W. Va.	12 million gals./yr.
Union Carbide	Texas City, Tex.	42 million gals./yr.
Total		*313.1 million gals./yr.

*Methanol capacity at mid-1958 expected to be 295.1 million gallons a year following shutdown of its Morgantown works by Olin Mathieson.

CH_3OH PRODUCTION

1958	*210 million gals.
1957	214 million gals.
1956	240 million gals.
1955	202 million gals.
1954	169 million gals.
1953	168 million gals.
1950	136 million gals.
1947	83 million gals.

*Industry Estimate

Source: Tariff Commission

Aliphatic Organics

Price reductions for technical grade gluconic acid were announced May 13. The resulting schedule listed a tankcar price of 13½ cents per pound, formerly 17 cents, and a drum carlot price of 18 cents, off 1½ cents per pound. For 10,000 pound lots in bulk or drums, and for less than carlot quantities, prices remained unchanged at 19 cents and 20½ cents, respectively. A spokesman for a leading producer offered several reasons for the price cut. Among them, he included competitive pressures—always a logical motive—process improvements, and the increasing volume requirements of industry for gluconic acid.

Price Trends

Advanced
None

Reduced
Gluconic acid, tech., tanks, 3½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
131.20	131.25	130.98	131.28

For Current Prices See Page 9

The most significant developments in the organic chemicals market recently have been price changes. Reductions in both formaldehyde (seven-tenths of a cent) and paraformaldehyde flake (1.70 cents) were announced early in May. Sebacic acid postings were shaved 3½ cents the last week in April. This last change was attributed to decreases in the costs of basic raw materials. The former, however, were competitive measures for the most part.

Rumors have methanol on the brink of a price cut. These have persisted for many months. But the reduction in formaldehyde is said to provide more substantial basis for such action.

Early in March, producers twice cut postings on both technical and monopentaerythritol. As a result, trade sources said, the market has firmed up though at a lower level. But price sniping, reportedly, is not yet dead.

For the acetic acid family of chemicals, prices are considered steady and unlikely to change. Demand is moderate and considerably improved from textile manufacturers. Market men find that the textile business, generally, does not admit the extent of weakness apparent in the automotive and construction industries.

Some trade reports have noted a softening in the glycerine market. Prices for domestic crude, it was reported, have dropped to 15½ cents per pound from a previous high of 16 cents. Overseas traffic in refined glycerine is said to be heavy and going to foreign consumers at less than domestic prices. There has been little trading of crude in the East in recent weeks.

According to the spokesman for a major producer, buying of ethyl alcohol, while somewhat limited in quantity was steadier and accounted for the good volume of sales maintained in March and April. He added that rush orders were becoming more and more frequent, an indication that consumers have long since cut inventories to the marrow—and possibly that business is on the upgrade.

Butyl Acetate — Inquiry has been steady and at a moderate level since March. While no upsurge in demand is anticipated, neither is a downswing likely, according to trade members. Prices are firm.

Ethyl Alcohol—Demand is said to have strengthened recently. Buying while steady is not in particularly large volume, however.

In the wide range of alcohol-consuming industries, inventories have been cut to the marrow. Thus, buying is more frequent and in smaller than normal quantities for fear of buying beyond actual requirements.

It was mentioned last week that a surprising number of orders are coming through to producers marked "rush." This indicates severely cut inventories and possibly a slight upturn in business.

Domestic consumption of ethyl alcohol in March was about 22 million gallons. Inventories at month's end were well adjusted to current demand, representing about 30 days requirements. In February, about 17½ million gallons were consumed as opposed to 22 plus million gallons in January.

This fluctuation in the consumption rate between 17 and 22 million gallons has been the existing pattern—and not in the least erratic—since June, 1955, a man in the trade points out.

Prices are considered to be very steady. Reasons can be readily supplied by any member of the trade for a price increase. However, such action is unlikely, considering the widespread recession psychology that firmly grips the nation.

Ethyl Chloride—Demand from pesticide formulators was said to have been fairly active this season. Other buying was more or less routine. This is under the best of circumstances a rather static market, not effected by business slumps and the like, trade sources say.

The tankcar price is listed at 10c. per pound, works. No changes are anticipated.

Formaldehyde—A new price schedule was announced by major producers, effective May 6. For 37 percent formaldehyde uninhibited grade the tankcar posting dropped to 3.5c. per pound from 4.2c. Other grades were also reduced seven-tenths of a cent per pound.

Various factors were said to be behind the recent price break. The most obvious, of course, was that supplies have continued to grow while demand has tapered off. Then too, there were unconfirmed reports that in certain instances formaldehyde was selling below listed prices. And this might have been sufficient reason for an announced price reduction.

What effect lower prices will have on eventual consumption is strictly a guessing matter. Based on the unsatisfactory results of recent price cuts in other organic chemicals, some trade members ex-

Ethyl Alcohol: March

Volume of ethyl alcohol produced, withdrawn and remaining as stocks at the end of the indicated periods, as reported by the Alcohol and Tobacco Tax Division, Internal Revenue Service: Domestic undenatured alcohol production represents gross production (original production plus production by redistillation) less the quantity consumed in redistillation. Stocks of domestic undenatured alcohol consist of quantities at industrial alcohol bonded warehouses and denaturing plants. Data on completely and specially denatured alcohol represent alcohol produced from domestic and imported alcohol and spirits produced by registered distilleries (redesignated upon receipt at denaturing plants as alcohol).

	March 1958	March 1957	July 1, '57 Mar. 31, '58	July 1, '56 Mar. 31, '57
NET PRODUCTION				
Undenatured .....proof gals.	42,732,502	35,428,979	369,323,564	326,587,259
Completely denatured.....wine gals.	36,466	19,839	492,484	475,482
Specially denatured.....wine gals.	20,953,685	19,019,859	182,787,716	180,970,284
WITHDRAWALS				
Undenatured, tax paid.....proof gals.	763,020	834,267	7,855,651	8,617,926
Tax free.....proof gals.	39,257,743	35,620,149	357,627,079	339,659,009
Completely denatured.....wine gals.	33,456	26,600	477,002	459,599
Specially denatured.....wine gals.	20,378,664	20,363,770	184,004,313	177,402,426
STOCKS AT END OF PERIOD				
Undenatured .....proof gals.	30,443,794	29,417,614	30,443,794	29,417,614
Completely denatured.....wine gals.	21,532	23,396	21,532	23,396
Specially denatured.....wine gals.	3,230,818	3,684,686	3,230,818	3,684,686

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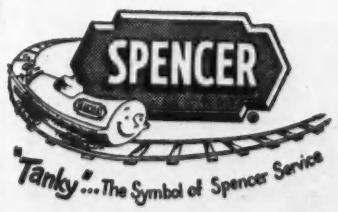

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Aliphatic Organics

pect no appreciable pickup in demand for formaldehyde.

There are those who take the opposite view, however. This latter group feels that consumers will buy more, banking on higher profits when and if heavy demand for their end-products materializes.

Gluconic Acid—Price reductions for technical grade gluconic acid were announced May 13. The resulting schedule listed a tankcar price of 13½c. per pound, formerly 17c., and a drum carlot price of 18c., off 1½c. per pound. For 10,000 pounds in bulk or drums, and for less than carlot quantities, prices remained unchanged at 19c. and 20½c. per pound, respectively.

A spokesman for a major producer offered various reasons for the price reduction. Among them, he listed competitive pressures from other chemicals having similar end-uses, process improvements, and the increasing volume requirements of industry for gluconic acid.

This chemical has been available in commercial quantities for about ten years. Rate of consumption, reportedly, has increased in successive stages. It has found fast favor as a cleaning compound, and in metal treatment as a sequestering agent.

Isobutylene—A major chemical firm has announced plans to enter the isobutylene market, fair indication that this is one organic chemical for which prospects of future growth look inviting.

The largest percentage of current isobutylene production goes into the manufacture of butyl rubber, 98 percent of which is isobutylene.

Consumption—considering both that material used by producers for captive requirements and domestic sales—is estimated to be in the vicinity of 35½ million gallons annually.

Molasses—Markets for feeding cane molasses were generally steady during the week ended May 13, according to Agricultural Marketing Service. Volume of consumption was reported lower in many parts of the country as good to excellent pasture conditions developed for livestock feeding. Demand was slow in the South and Midwest, moderate elsewhere.

Prices at New Orleans were mostly 14.5c. per gallon with indications that quotations at the top of the price range were largely nominal.

Industrial molasses used in the production of alcohol products other than ethyl totaled 2,468,499 gallons during March as opposed to 770,049 gallons used for this purpose in February.

Oxalic Acid—A variety of industrial uses—principally in the cleaning field—affords this chemical steady though moderate demand the better part of the time. The clearly defined, long-established end-use pattern also accounts for a rather static market.

Consumption has increased gradually and steadily in recent years, sources say. Production in 1957 was up 3 million pounds from the previous year.

The current carlot price is 18½c. per pound, works. This quote is thought firm and unlikely to change.

Paraformaldehyde—A leading producer revised postings May 8, following the formaldehyde price reduction (May 6). The price cut amounted to 1.70c. per pound.

The new schedule lists 91 percent flake at 9.55c. per pound, bags, carlots, delivered (1,000 pounds or more). For less than carlot quantities the quotation is in a range of 11.55c. to 12.55c.

Paraformaldehyde flake is competitive in the same market with aqueous formaldehyde.

Buying interest has been limited in past weeks. Supplies have been increasing. Price action, however, had little to do with this unbalanced supply and demand picture, sources said.

Pentaerythritol—Some men in the trade say that they have found the price reductions of a few months back a definite spur to sales. Others, however, have seen no appreciable improvement but note that sales have been maintained at about the same level.

At the end of March, one producer eliminated the 1 cent differential between east and west coast prices which in effect constituted a price reduction as far as west coast buyers were concerned. Other producers have not followed suit. There is, reportedly, differences between their grades of PE and that being offered a penny cheaper.

On the price front, there has been no official action since March. It is rumored, however, that there have been recent instances of competitive pricing.

The Tariff Commission reported that production of PE in February amounted to 3,995,761 pounds against 3,947,296 of the preceding month.

Propylene Glycol—Production declined to 6,749,914 pounds from 9,127,351 of the preceding month, according to a Tariff Commission report. The cutback in production attests to the fact that demand over past months had been limited and supplies had increased correspondingly. Some slight improvement in buying interest has been reported lately, however.

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Methanol Makers Hoping for Lift From Planes

OPD Special Report

—*Continued from page 38*

tion a couple. It is even reported that an automobile producer is using a water-base primer coat.

While moderate growth can be expected, PE doesn't look as attractive as it did only a few years ago. Methanol men have given up on any ideas of startling growth for PE as a possible spur to sales.

Hexamethylenetetramine, which achieved fame in World War II in the explosive RDX, used in blockbusters, has never reached anything like the production levels it achieved at that time—and what's more, it's not likely that it will.

The more concentrated formaldehydes, paraformaldehyde and trioxane show much promise. However, when considered against overall volume, they are not that important.

Summarizing the formaldehyde picture: No one end-use for formaldehyde appears to be dynamic. As the thermosetting resins go, so will go the future of HCHO.

Borden, Durez and Merck

On the brighter side, there are five formaldehyde producers this year who do not have captive methanol production. Chief of these is Borden Company, New York, with an estimated 101-million-pounds-per-year HCHO capacity.

Durez Plastics Division of Hooker Electrochemical Company, Niagara Falls, N. Y., and Merck & Co., Rahway, N. J., are each estimated to be able to produce 50 million pounds a year of formaldehyde.

None of the three mentioned plans to become basic in methanol in the near future. Borden appears to be the one to watch, however, since the company is putting up a methanol plant in Brazil, and has the immediate know-how.

Looking at antifreeze as an end-use for methanol, it is here perhaps that the methanol market has been hurt the most. A glance at percentages shows it: In 1947, methanol antifreeze accounted for 38.1 percent of total methanol consumption, and last year, only 8.8 percent—a breath-stopping slide.

Antifreeze Consumption Dropped

In that time, methanol antifreeze consumption dropped from 32 million gallons (of a total of 84 million produced) in 1947 to 19.1 million gallons (of a total of 213.6 million produced) in 1957.

A few years back, it was assumed that as long as water-cooled piston engines were being produced for automobiles, methanol would hold its own against higher-priced ethylene glycol antifreeze.

Chief concern in those days was whether, or how soon, automobile producers would install gasoline turbine engines in their cars thus eliminating the necessity for methanol, or, for that matter, ethylene glycol.

But a strong trend developed in the direction of glycol, and by 1957, the so-called "permanent" type antifreezes accounted for 82 percent of all antifreeze sold. Biggest blow to methanol during the year was Ford Motor Company's switch from methanol to glycol in new cars.

Giving Upon Antifreeze Market

With consumers clamoring for glycol antifreeze (to the tune of 87.7 million gallons in 1957), methanol producers have just about given up on the antifreeze market.

Some faint hope is expressed that due to the current recession, some auto owners might switch back to methanol because it is cheaper.

However, since auto antifreeze is the most important outlet for the glycol industry, some observers suspect that in order to keep the business in such a case, glycol permanent antifreeze would be kept competitive.

It is also hoped in the industry that logical expansion of automobile production and increasing auto population during the next few years will serve to keep methanol in the antifreeze picture.

The big "if" in the future—the gas turbine engine "if"—could wipe out the antifreeze market completely. Some automobile industry crystal-gazers say this could happen by 1975.

A swift examination of methanol's solvent and denaturant applications shows that use in this field doesn't seem to be making any headway. In 1953, solvent and denaturant use was placed at 10 million gallons. Total methanol output that year was 168.3 million gallons.

But in 1957, use of methanol as a solvent and denaturant again totaled an estimated 10 million gallons, from a total production of 213.6 million gallons.

Methanol producers don't expect this end-use to do any better than it has. For one thing, methanol used to denature ethanol isn't expected to go anywhere in particular.

Another end-use, methyl chloride, consumes a small percentage of methanol. Growth of this chlorinated hydrocarbon has been steady, and the future looks good in the methylchlorosilane field.

Outlook for Methylchlorosilanes

Methylchlorosilanes are used in the formation of silicones, for which the future looks very bright. However, the methanol picture here is obscured by the fact that a goodly amount of methyl chloride is manufactured by direct chlorination of methane.

Methylamines, another end-use for methanol, at present do not show much promise. Methanol producers do not see any particular spurt in demand from this area in the future.

In regard to methyl acrylate and methyl methacrylate, predictions in the industry are that production of methyl methacrylate

—*Continued on next page*

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Methanol Makers Hoping

OPD Special Report

—*Continued from page 41*

monomer can be expected to jump to 150 million pounds per year in the near future. This compares with an estimated volume of 90 million pounds annually in 1957.

DuPont and Rohm & Haas are the two active producers. A cloud on the horizon is Hercules' decision not to build a methacrylate plant in conjunction with Imperial Chemical Industries, Ltd. This might make forecasters reappraise their optimistic predictions about methacrylate growth.

Furthermore, this field isn't very attractive to the rest of the methanol industry for the simple reason that both Rohm & Haas and duPont have plenty of their own methanol—and should Hercules decide to go ahead in the future, it will have its own methanol as well.

The export market for methanol is one of its least spectacular features. Where exports had been expected to grow, they have actually declined. In 1957, exports declined percentagewise to 2.7 percent of the total market.

Prospects for Miscellaneous Uses

Among the many miscellaneous chemicals in which methanol is used in synthesis, no one item is expected to mushroom in the future. Steady growth can be expected in many chemicals, but nothing spectacular.

A momentary glance at the natural methanol picture shows that this material is a small-volume item. It is manufactured to the tune of about 2 million gallons annually. In fact, it didn't even reach that level in 1957. Bureau of Census figures show production of 1,956,000 gallons for the year.

Summing up the end-use pattern for synthetic methanol, the future looks far from dynamic in most applications. Methanol producers find themselves up in the air, both literally and figuratively.

They look to the skies hoping that civilian aviation will help them out of immediate and future problems. Moreover, right now they are up in the air trying to anticipate ADI fluid needs for the immediate and distant future.

Texas Butadiene's Butenes Are Available Commercially

Texas Butadiene & Chemical Corporation, Houston, Tex., has high purity butene-2 and butene-1 concentrate available in commercial quantities.

Butene-2 is available in 96 percent minimum concentration, is free of isobutylene, contains less than 0.5 percent butene-1, and less than 1 percent butadiene. The remainder is n-butane. Butene-1 concentrate is 60 percent minimum butene-1 content. The remainder is essentially butanes except for isobutylene in concentrations up to 5 percent.

Until now, butylenes have been commercially available only as mixed isomers, mainly from refinery catalytic cracking operations.

Acrylic Lacquers for Autos Offered by Sherwin-Williams

Sherwin-Williams Company, Cleveland, Ohio, is introducing a line of acrylic lacqeurs for automotive refinishing. The move is prompted by the continued increase in the use of such lacquers, the company says.

Citing statistics, Sherwin-Williams notes that in 1956 only five or six acrylic lacquer colors were used in production. That number jumped to twenty the following year. On this year's models some thirty-two colors are factory applied and indications are, the company added, that the number used in 1959 production will at least double.

Cortisone Developed by VA Is Okay for Heart Patients

A cortisone that can be used for heart patients has been reported by the Veterans Administration. The administration says that research at its center in Martinsburg, W. Va., has produced definte evidence that triamcinolone, a new drug for treating arthritis, rheumatism and other allergies, can be used safely for heart patients.

Most of the anti-inflammatory drugs related to cortisone that have been used in the past made the condition of heart patients worse by increasing retention of salt and water, the administration said. The finding of triamcinolone is one of the results of a multi-pronged program of research into problems of aging.

Plant Food Meeting

—*Continued from page 7*

scheduled for June 15 and a meeting of the board will also be held on June 18.

The annual business meeting of the membership will be held at the morning session on June 16.

On Monday, June 16, the program will feature the panel discussion on "Changing Farmers' Attitudes Toward Fertilizer" with Dr. M. S. Williams, chief agricultural economist of the institute, speaking on "Farmers' Present Attitudes"; Dr. Webster Pendergrass, dean, College of Agriculture, University of Tennessee, on "What Can State Agricultural Colleges Do?" and W. E. McGuirk, chairman, National Plant Food Institute special study committee, on "What Can Industry Do?"

Regional Reports

The panel will be followed by a presentation, "What Is the National Plant Food Institute Doing," featuring brief regional reports on the subject by Dr. Richard B. Bahme, western district representative; Zenas H. Beers, midwest regional director; Dr. Samuel L. Tisdale, southeast regional director; Dr. Robert L. Beacher, southwest regional director; Dr. Willard H. Garman, northeast regional director, and F. Todd Tremblay, Pacific northwest district representative.

In the afternoon, the panel discussion will be conducted on "Changing Farmers' Fertilizer Practices" sponsored by the institute's research and education committee, with A. H. Bowers as chairman and moderator.

Other speakers and subjects for the panel are: Orvile Buerge, Buerge Brothers, Harrisonville, Mo., on "The Dealer's View"; J. W. Clark, Dane County Agricultural Extension Director, on "The County Agent's View," and Harry Rash, president, First National Bank, Thayer, Kans., on "The Banker's View."

Films to Be Offered

On Tuesday, June 17, the session will open with a film presentation on "The Salesman," followed by the time-lapse film and the feature address of the session delivered by Mr. Scribner.

The annual banquet will be held June 17, at which Dr. Russell Coleman, executive vice-president of the institute, will present scrolls to the two winning editors in the sixth annual nation-wide "Soil Builders Award for Editors" contest.

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Petroleum Derivatives

Market conditions prevailed at previous levels sources here reported last week. Toluene, at recently reduced positions, remained sluggish with heavy stock conditions overshadowing the persistantly low sales picture. Microcrystalline stood fast at previously found strong levels on both the domestic and foreign scene while some of the partial aromatics found strength through non-industrial paint sales. The automotive industrial picture continued to impede any hope for upward movement in the market of most solvents and diluents. Benzene was reported very slow in demand and sales for xylene also were less than might be desired. LPG's, of course, despite an ever more diverse market area, reflected the post-seasonal period with a relaxed sales picture. The price structure remained at previous levels and sources said they expected no shift in price.

A report from Southwest Research Institute has it that consumption of LPG, now about seven billion gallons per year, is slated to climb 100 percent by 1975. Most of the gain, according to the institute, will come from increased domestic and motor-fuel usage.

Domestic synthetic rubber capacity, either installed or being built, totalled 1,582,000 long tons at the beginning of this year, according to a report. Of the total GR-S rubber capacity accounts for 1,236,000 long tons; neoprene, 125,000 long tons; butyl, 105,000 long tons and nitrile, 66,000 long tons.

The American Petroleum Institute estimates that the daily average production of crude oil and lease condensate for the week ended May 2 was 6,227,035 barrels. Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 7,078,000 barrels of crude oil daily.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
106.73	106.73	106.73	107.64

For Current Prices See Page 9

Solvents and Diluents

Benzene—No variations were made in this market last week sources here reported. Conditions continued pretty much at previous levels with stocks remaining high and sales at limited levels. Production also was said to reflect some curbing movements. Counter-price-slash arguments continue based on the premise that price shift would in no way prompt higher sales. The argument has prevailed for some time and price has stood fast at present levels for some years. Though shading may be taking place in given instances and situations, the general condition is one of steady low-level sales in already recognized areas. The automotive industrial slump, of course, is one of the prime benzene blocks from a stronger market.

Toluene—This material continued to show a sluggish market on spot last week, sources here reported, despite the recent slash in price structure. Conditions in many areas, producers say, are highly competitive while in other sectors, sales remain based nearly totally on the geographical location of the nearest production point. On the whole, it was said, conditions have changed little for toluene since steel producers first prompted the price cut. The source of the problem appears to be that the market for toluene that once was available is just no longer to be found and thus the heavy excesses of stock and the dirth of sales. When the economy climbs from its present slump, of course, it is expected that conditions for toluene will improve.

However, the elemental fact that there is more material being produced than is being consumed is one that, according to producers, transcends the present economic dip. How this situation should be relieved remains to be seen.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended May 3 totaled 276,316,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 275,534,000 barrels for the preceding week, this represents an increase of 782,000 barrels comprising an increase of 632,000 barrels in stocks of domestic crude and an increase of 150,000 barrels in stocks of foreign crude.

LPG's

Production of liquid petroleum gases during the first two months of this year, according to the Bureau of Mines, was computed at 9,447,000 barrels as compared with the 9,101,000 barrels produced during the first two months of 1957. Exports of LPG's during February were tallied at 265,000 barrels as compared with the 283,000 barrels exported during January and the 382,000 barrels exported during February, 1957. Exports for the first two months of the year were tallied at 548,000 barrels as compared with the 780,000 barrels exported during the same period of the year previous. Stocks of liquefied gases during February were tallied at 1,654,000 barrels as compared with the 1,641,000 barrels in stock at the end of January and the 1,551,000 barrels in stock at the end of February of the year previous. Domestic demand for LPG's was computed at 17,959,000 barrels during February.

Waxes

Microcrystalline — Production of this material has stood at a good level the past months in response to continued growing seasonal demand. Conditions for microcrystalline have been reportedly good for some time and despite the fact that some of the effects of the present economic decline have made themselves felt in this market, the condition has remained with a certain durability not to be found in other areas of the market. This is partially attributed to the fact that microcrystalline is so heavily keyed with the vigorous and always wax container market. Not only is this market growing and developing new sales areas domestically, but also a healthy foreign market is being developed.

Paraffin—The market for this material continued at a steady level. Dealers said that conditions were not excessively strong nor were they weak. Some strength for paraffin petroleum wax is derived from a market alongside microcrystalline in the wax container industry. However, much less paraffin is used in this market than is microcrystalline. The feeling is that some other markets, at one time strongly held by paraffin, are no longer completely in the hands of this material.

Miscellaneous

Crude Oil — Crude oil production in Saudi during April totaled 27,849,205 barrels or an average of 928,307 barrels per calendar day, according to one source. This compares with 27,552,782 barrels or an average of 918,426 barrels per calendar day, during the same month last year. Crude processed during April amounted to 5,087,656 barrels, an average of 169,589 barrels per calendar day, as compared with 4,960,319 barrels, an average of 165,344 barrels per calendar day during the same month last year.

Total production of crude oil in Arabia during the first four months of 1958 was 120,523,159 barrels, an average of 1,004,360 barrels per calendar day. This compares with a total of 92,795,683 barrels, an average of 773,297 barrels per calendar day, during the same period last year.

Crude run in the refinery during the first four months of 1958 amounted to 22,653,310 barrels, an average of 188,778 barrels per calendar day, as compared with 24,028,349 barrels, an average of 200,236 barrels per calendar day, during the same period last year.

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Coal Chemicals

Coal chemicals markets were quiet again last week. Large volume items continued to move in literally hand to mouth manner for immediate or nearby need. Producers posted two minor changes in the intermediates group. An 11.7 cents per pound tankcar price on dodecylbenzene was established as against a previous quotation of 12 cents per pound. Carload and less carload prices on this item were unchanged. Most producers had gone along with the change. A delivered price was established on cyclohexane, 99 percent, for shipments both East and West of the Rockies. Previously the delivered price had been quoted only East of the Rockies. Net result of the change was a 7 cent reduction in carload-truckload lots and a 6 cent reduction in less than carlots on shipments East of the Rockies. In the West a delivered price was established whereas it had previously been quoted f.o.b., West coast plant. Tankcar lots were listed at 55 cents per gallon, f.o.b., West coast plant.

Price Trends

Advanced
None

Reduced
Cyclohexane, carload, dlvd. East of Rockies, 7c. per gal.
l.c.l., same basis, 6c. per gal.
Dodecylbenzene, tanks, 3/10c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
118.13	118.13	118.13	118.19

For Current Prices See Page 9

Naphthalene market continued to flounder in the wake of hand to mouth orders for phthalic anhydride. Producers in these markets have felt that a low point had been reached and that consumers would have to start buying in heavier volume in order to continue operations. Import naphthalene remained readily available from both East and West European sources in a range of 3¼ to 3½ cents per pound.

Sales of toluene continued to level out after the flurry of buying noted after cokeoven operators established a 25 cents per gallon price some weeks ago. Paint sales have held up well all spring, but it was pointed out that the slow season for solvents was just ahead. Some sources felt that there was a good bit of benzene around. On the other hand reduced coking operations have cut into production and with ovens at lower temperatures and on longer cycles, it was felt that some producers could have trouble making high specification benzene. However, other sources pointed out that petroleum capacity loomed in the background. Xylene postings on coaltar material remained unchanged from last report.

American Iron and Steel Institute reported steel production in the week ended May 11 amounted to 49.4 percent of theoretical capacity. Estimated steel production in the week ended May 18 was 1,400,000 net tons while actual output for the week previous was 1,334,000 tons. Production in the comparable week one month ago was 1,285,000 net tons and 2,155,000 tons in the corresponding week one year ago.

Shipments of finished steel products in the first quarter totaled 13,928,675 net tons compared to 22,689,781 net tons during the same quarter last year. Total shipments during March were 4,448,526 net tons compared with 4,262,935 in the previous month and 7,821,616 net tons in March, 1957.

Basic Products

Benzene—Material continued to be readily available. However, sources pointed to a number of circumstances which made an oversupply of serious proportions unlikely. With reduced steel rates, producers lower oven temperatures and lengthen cokeoven cycles in order to curtail by-product production and cut down on wear and tear of refractory brick. Content of benzene in the light oil drops from about 60-70% to approximately 50%. At the same time toluene content is correspondingly increased. It was said that at the lower rates, some producers might have trouble producing benzene to meet specification for some applications where freeze point is particularly important.

Cokeoven output in March amounted to 9,980,671 gallons as against 9,212,310 in the previous month and 16,935,638 gallons in the comparable month last year. Production in the first three months of this year was 29,937,838 gallons compared with 49,115,695 gallons in the three month period last year.

Coaltar—Cokeoven output of crude coaltar during March was 54,338,174 gallons as against 51,340,327 in the previous month and 77,264,072 gallons in the comparable month one year ago. Output for the first three months of the year amounted to 164,639,314 gallons compared to 222,975,929 in the three month period last year.

Sales in March were 24,898,841 gallons compared to 20,694,842 in the previous month and 35,547,686 in March, 1957. Sales for the January through March period this year were 73,475,207 gallons compared with 97,164,268 gallons in the like period last year.

Stocks, end of month, amounted to 38,639,031 gallons at the close of March as against 37,013,557 in the previous month and 38,251,046 gallons in the comparable month one year ago.

Cresylic Acid—Producers continued to encounter slackening demand, although some sources said the overall tar acids market was not too bad. Makers felt that if sales could be held at current levels and not deteriorate any further, a good fourth quarter would afford them a satisfactory year. Production in the first two months of the year was about 400,000 gallons less than in the comparable period last year. Prices were unchanged from levels in effect for several months. Trade sources looked for no changes in these markets.

Naphthalene—This market continued to exhibit the poor overall tone which has been in evidence for many months. Material was readily available from east and west European sources at 3¼c. to 3½c. per pound, according to trade reports of last week. Domestic lists were unchanged at 7c. per pound. The slow aspect of the phthalic anhydride market for over a year was the source of major concern to naphthalene producers and the situation in the former market has shown no marked sign in improvement since the first of the year. There have been flurries of buying, but amounts were small and in hand to mouth fashion. The one good sign for phthalic makers and subsequently for naphthalene producers appeared to be the fact that consumers have been operating on very low inventories for some time. It was felt that there was no room for further inventory liquidation and that consumers would have to begin buying again in larger quantities to keep up their operations. With the summer slow season coming up and shutdowns for plant vacations and repairs in the offing, the prospect for an early upturn appeared remote indeed.

Solvent Naphtha—Bureau of Mines reported production of crude heavy solvent in March amounted to 387,611 pounds compared to 250,913 in the previous month and 559,444 in the comparable month one year ago. Output in the first three months was 1,017,498 pounds as against 1,527,635 pounds in the like period last year.

Sales in March were 310,582 gallons, 262,800 pounds in February and 489,820 in March 1957. Sales in the first three months of this year amounted to 965,935 pounds as compared to 1,458,059 pounds in the three month period last year.

Stocks, end of month, were 276,497 in March, 219,791 in the previous month and 369,306 pounds in the comparable month last year.

Toluene—Trading in coaltar toluene continued to level out after the marked flurry of buying which followed the establishment of a 25c. per gallon price last month.

Exports in the first two months of 1958 were more than twice the amount exported in the comparable period last year. Output of nitration toluene from cokeovens in March totaled 1,931,372 gallons as against 1,753,499 in the previous month and 2,781,455 gallons in the comparable month one year ago. Production in the first three months of this year was

Coal Chemicals

of this year was 5,535,272 gallons compared to 8,060,924 gallons in the like period last year.

Consumption remained off from last year, although coaltar sources have pointed out that paint sales this year have held up very well.

Xylene—Production of coaltar xylene in March amounted to 680,088 gallons as compared to 8,060,924 gallons in the like period last year.

Sales were 699,534 gallons in March compared to 621,164 in the month previous and 949,026 in March, 1957. Sales in the first three months of this year amounted to 2,071,776 gallons as against 2,699,616 gallons in the comparable period last year.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending May 18, was as follows:

Ammonia liquor	lbs.	412,030
Ammonium sulfate	lbs.	22,588,444
Benzene	gals.	2,234,122
Coaltar	gals.	10,831,821
Crude chemical oils	gals.	283,843
Solvent naphtha crude, heavy solvents	gals.	73,249
Toluene	gals.	476,124
Xylene	gals.	137,343

Intermediates

Anthraquinone — A basic producer recently announced plans to build an anthraquinone plant which would utilize a new process involving direct reduction of naphthalene in a fixed bed catalytic converter. The new unit would replace and expand existing anthraquinone facilities and provide added capacity for the production of methyl anthraquinone, naphthoquinone and phthalic anhydride. It was felt that developmental work done in recent years on herbicide, fungicide and insecticide products formed the basis for a good potential market outlet for naph-

Cyclohexane—A basic producer last week established a delivered price on carload and less carload lots for both East and West of the Rockies. Previously the delivered price had been in effect only in the East.

Under new schedules, cyclohexane, 99%, delivered East of the Rockies, was $1.02 in carload and $1.10 per gallon in less than carload lots. Price on material delivered West of the Rockies was 77c. per gallon in carload and 85c. per gallon in less than carload quantity.

Prices compare with the previous East coast delivered listing of $1.09 per gallon in carload and $1.16 per gallon in l.c.l. lots. The reduction amounted to 7c. per gallon in carload and 6c. per gallon in l.c.l.

Previous price West of the Rockies was carload, 71c. per gallon and less carload, 78c. However, prices were quoted f.o.b., West coast plant.

Price in tankcar lots was 55c. per gallon, f.o.b., West coast plant, for both East and West of the Rockies.

Cyclohexylamine—Price was unchanged at long established levels. Producers quoted 47c. per pound in tanks, 49c. per pound in carlots and 50c. in l.c.l. quantity. Market was routine.

Dodecylbenzene—A tankcar price of 11.7c. per pound was established in the trade as against a previous listing of 12c. Most producers indicated they would go along with the 3/10c. per pound reduction. Carlot listing remained at 14c. and less than carlot price was also unchanged at 15c. per pound.

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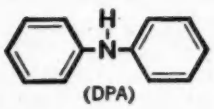

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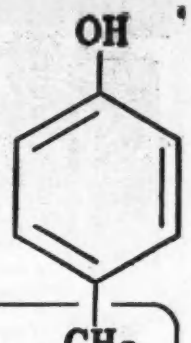

Typical Analysis

Purity	98+%
Freezing point	33.5°C.
Moisture	0.15%
Color of melt at 40°C.	1 Hellige
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Form	low-melting crystalline solid
Odor	phenolic and not sulfurous

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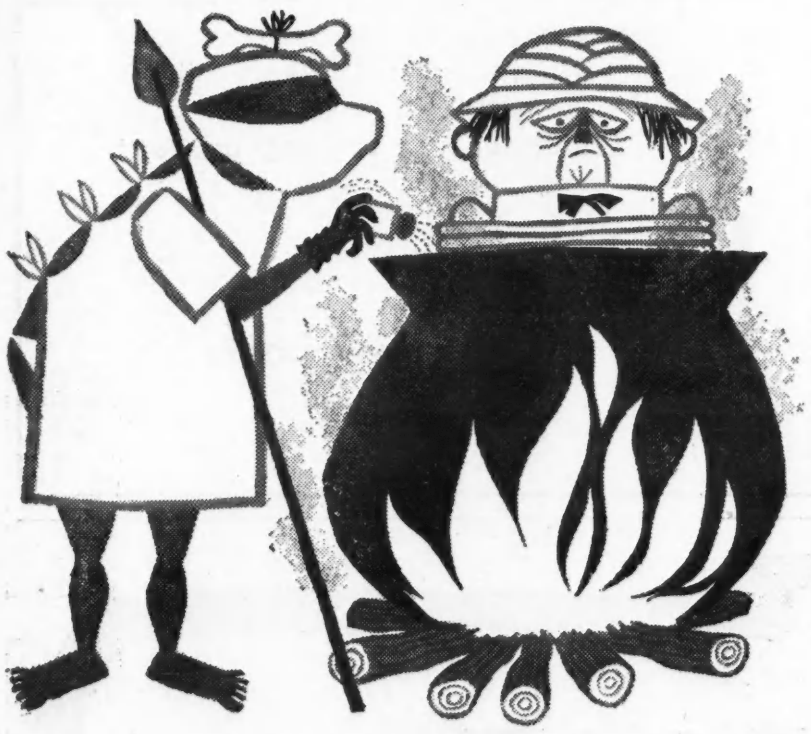

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USS Chemicals

Jobs & People

Acheson Dispersed Pigments Company, Philadelphia—**Edward W. DeLaet** has been made manager of the Xenia, Ohio, plant. **Richard H. Alex** has been appointed to the market research and development group in the sales department.

American Mineral Spirits Company, Chicago—**Richard R. DeGraf** has been appointed a sales representative for American Mineral Spirits Company, Western.

Aries Associates, Inc., Stamford, Conn.—**Gilbert E. Collyer** has been named contract manager.

Ciba Company, New York—**Donald M. Joseph** has been appointed technical sales representative for the coatings resins department.

d-Con Company, New York—**V. Kenneth Mars** has joined the firm as asssistant manager of sales to the drug field.

Diamond Alkali Company, Cleveland, Ohio—**R. H. Gingrich** has been promoted to the position of sales staff assistant in the silicate, detergent calcium division.

Drum Parts, Inc., Cleveland, Ohio —**John J. Kojan** is in Marymount Hospital, Cleveland, recovering from a recent illness.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Clarence Belcher, Louis Spiegler** and **Viktor Weinmayr** have been named senior research chemists at the Jackson laboratory in Deepwater Point, N. J. **Frederic Stilmar** has been appointed to a similar post in the organic chemicals research laboratory at the Wilmington experimental station.

B. F. Goodrich Chemical Company, Cleveland, Ohio—**Joseph P. Piers** has been named to head the production department at the firm's new general chemicals plant in Henry, Ill. **Earl W. Wilson** has been appointed maintenance foreman there. **Orville W. Taylor** has been assigned to Henry as senior engineer, while **Charles D. McCrosky** and **Allen W. Otto** have been transferred there to act as shift foremen in the laboratory facilities.

Lion Oil Company Division of Monsanto Chemical Company, El Dorado, Ark.—**William B. Rogers** has been appointed assistant manager of asphalt sales.

Monsanto Chemical Company, St. Louis, Mo.—**Dr. Ralph I. Dunlap** has been appointed to the newly-established post of production service manager for eastern operations in the plastics division at Springfield, Mass. **Dr. Cecil E. Johnson** has been named assistant research director for the division in charge of planning, personnel and control functions. **Robert R. Lawrence** has been promoted to manager of planning, succeeding Dr. Johnson. **Dr. Manuel M. Baizer** has joined the research department of the research and engineering division in St. Louis.

National Carbon Company, division of Union Carbide Corporation, New York—**Raymond P. Bergan** has been appointed vice-president for consumer products.

National Starch Products, Inc., New York—**William Juenger** has been appointed sales representative for resin coatings division in Missouri, Iowa, Nebraska, Kansas, Oklahoma, Arkansas, southern Illinois and western Tennessee.

Pacific Vegetable Oil Corporation, San Francisco—**Lowell Cummings** has joined the company as head of the surface coatings group in its research and development department.

Parke, Davis & Co., Detroit, Mich. —**Anthony Van Zwaren** has been appointed the new regional manager of the Teheran, Iran, sales office. **William B. Jett** has been named field manager in the St. Louis, Mo., branch, while **T. J. Satwicz** has been assigned to a similar post in the Detroit branch. **George W. Smith** has been made Minneapolis, Minn., branch manager, succeeding **Leo S. Flanedy** who has retired after thirty-six years with the concern.

Pennsalt of Washington Division, Pennsalt Chemical Corporation, Tacoma, Wash.—**Robert Kennel** has been added to the agricultural chemicals sales staff.

Pfizer Laboratories division of Chas. Pfizer & Co., Brooklyn, N. Y. —**Ruvane Edward Grossman** has been appointed a professional service representative in the metropolitan New York area.

Pittsburgh Coke & Chemical Company, Pittsburgh, Pa.—**Donald L. McCuen** has joined the industrial chemicals division as a sales representative.

Potash Company of America, Carlsbad, N. M.—**Russell L. Gulick** has been named sales representative for Florida, with headquarters in Atlanta, Ga.

Reichhold Chemicals, Inc., White Plains, N. Y.—**Sidney Lauren** has been appointed manager of technical services for surface coating emulsions at the Elizabeth, N. J., plant.

Shell Development Company, New York—**Harold T. Byck** has been named assistant to the vice-president of the exploration and production research division in Houston, Tex.

Sinclair Chemicals, Inc., a subsidiary of Sinclair Oil Corporation, New York—**William J. Arnold** has has been taken on as a sales representative with headquarters in New York.

Whittaker, Clark & Daniels, Inc., New York—**Walter M. Keegan** has been named sales representative for the company's line of polishing compounds.

SK&F Elects President, Board Chairman and a V.P.

Smith Kline & French Laboratories, Philadelphia, has elected Walter A. Munns president. Mr. Munns, formerly executive vice-president, succeeds Francis Boyer.

Mr. Boyer reaches retirement age next month and has been elected chairman of the board. At the same time the company reported that Thomas M. Rauch was elected vice-president in charge of medical promotion.

Phila. Drug Outing Scheduled

The Philadelphia Drug Exchange will hold its annual spring outing at Cedar Grove Country Club, Philadelphia, June 4.

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Agricultural Chemicals

Predictions as to how fertilizer sales this season will stack up against those of the 1956-57 fertilizer year vary. Some people in the trade say that tonnage will be off anywhere from 5 to 8 percent. The more pessimistic forecast a drop of 12 to 15 percent. Potash producers, generally, expect what they consider a slight decline. April set a record for actual potash deliveries, they said, but inquiry in May has not lived up to expectations. Phosphate demand also has been moderate. The state of the market for these two materials naturally reflects the consumption rate of mixed fertilizers.

Shipments of nitrogen chemicals were steady and in large volume in April, following intermittent deliveries in March. Sales of these materials should be given a needed booster shot by the necessity of top or side dressing fertilization of corn and cotton later in the season.

Side dressing of corn will be possible till mid-July. The use-period for cotton is still more open-ended, it's said.

Pastures also may require more nitrogen. There are negative factors to be considered here, however. Already, the hay crop is reported to be 50 percent higher than this time last year and 53 percent above the average. Thus, it is difficult to determine whether there will be much incentive for the farmer to fertilize further.

According to reliable sources, this is how the fertilizer situation looks at present:

In the southeast, tonnage is considerably off from last year. This is due to the prolonged period of rain and cold there this winter. As of April 30, fertilizer consumption in South Carolina was 21.6 percent less than by the same date last year. More than likely, no better than half of this loss will be made up.

Heavy rains and in some instances flooded fields in the Delta area have retarded the cotton planting season or made replanting necessary. If the weather continues fair, fertilizer sales in this area will not be off appreciably, it's thought.

In the central states, there is no shortage of moisture to be sure. Demand has been slow in materializing for the most part.

Consumption of fertilizer in the far west has been steady and in large volume.

In the Pacific northwest, sales are reported to be running ahead of last year.

Price Trends

Advanced

Fishmeal, Atlantic coast, Gulf, $2 per ton
Fishscrap, Atlantic coast, Gulf, $1-$2 per ton

Reduced

Blood, Chicago, 50c. per unit-ton
Tankage, Chicago, 50c. per unit-ton

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
109.71	109.54	109.33	111.06

For Current Prices See Page 9

Animal and Plant Foods

Animal Proteins — Postings on dried blood and tankage at Chicago declined 50c. to $8 per unit ton last week. A source here attributed the price drop to slackening interest on the part of feed manufacturers. Other postings on the roster of animal protein materials remained unchanged.

Fishmeal and scrap on both Gulf and Atlantic coasts were quoted at $133 and $129 per ton, respectively. (In certain areas, scrap sold at $128.) Supplies were described as moderate, the market steady to strong. Demand while only fair early last week is expected to broaden as the month progresses and continue at a good level through June.

Potash—Actual deliveries of potash in April broke the industry's record for total shipments during any one month. So said one member of the trade last week. He added that buying interest thus far in May has been moderate but somewhat less than was anticipated earlier.

It's generally believed that there will be a slight decline in potash sales this year. And in keeping with the general business trend, inventories on hand at the close of the fertilizer season will probably be smaller than was customary in the past.

At the present time, at least five US firms are preparing for eventual production of potash in Saskatchewan, Canada. Still others are conducting exploratory operations.

The vast Saskatchewan area is reported to contain the largest potash reserve in the world. And at least as much and a better quality of ore than could be found in the entire Carlsbad, New Mexico field before mining operations began there some years ago, it's thought.

Sources said that eventually it will be possible to maintain double the production of Carlsbad.

An annual production of 60 million tons is forecast. This may be reached in less than a decade. It will depend, of course, on the rate of plant expansion and the extent to which demand will broaden in the three largest potential markets—the US Midwest, Asia and Canada.

Production at the Patience Lake site of one of the largest US potash firms is due to come on stream by the end of 1958. This facility represents an investment of $20 million, according to information the company passed on to stockholders.

Approximately 200 miles from Patience Lake, at Esterhazy, the Canadian subsidiary of another US firm is readying an $8 million plant (total investment is also said to be $20 million). Commercial production is thought unlikely before the final months of 1959.

A Canadian firm is due to complete exploratory operations at Nokomis, 100 miles northeast of Regina, later this month or in June. This firm, reportedly, is investigating a brine recovery method for obtaining potash. If this method proves advantageous—and to date experiments are said to be meeting with considerable success—the Canadians will also start production on a commercial scale.

Pesticides

DDT—Heavy export demand coupled with steady domestic buying has resulted in a reported shortage of technical DDT. At the same time, it has imparted a firm tone to the overall DDT market.

Suppliers said last week that buying interest in the cotton South has been a trifle slow considering the lateness of the season, but expected demand to mature shortly. They explained that excessive rains which have flooded fields in some of the Delta region have delayed cotton planting and in some states—Mississippi, for example—made replanting necessary.

DDT is an important element in the majority of cotton pesticide formulations. It is combined effectively with BHC, toxaphene, and aldrin. These last are designed to protect cotton from the boll weevil, while DDT attacks worms, mites and other cotton pests.

Trade sources reported that the season for pesticide application of fruit is opening up in the Northwest, Michigan and Virginia. Fruit follows cotton in importance as an outlet for DDT, it was said.

Prices on both flake and powdered DDT were advanced April 1 to 22c. and 23c. per pound, respectively, in carload or truckload quantities. These prices are considered stable at present.

Ethyl Parathion—Demand is fair to moderate, supplies ample. The chemical is listed at $1.36 per pound, carlots and at $1.41 in less than carlot quantities.

Methyl Parathion — Heavy rains throughout most of the cotton belt have retarded sales of this chemical so far this season. It's expected that demand will begin to blossom out shortly, however. Cotton planting has commenced in the Carolinas and farther south and west, farmers are either preparing for an initial planting or replanting.

Trade sources anticipate brisk demand through June. Normally, buying begins to taper off in early July, they said, but it's possible that the season might continue a bit longer since plantings, generally, are later this year than customary.

Prices which dropped 15 cents per pound in mid-March are considered relatively firm.

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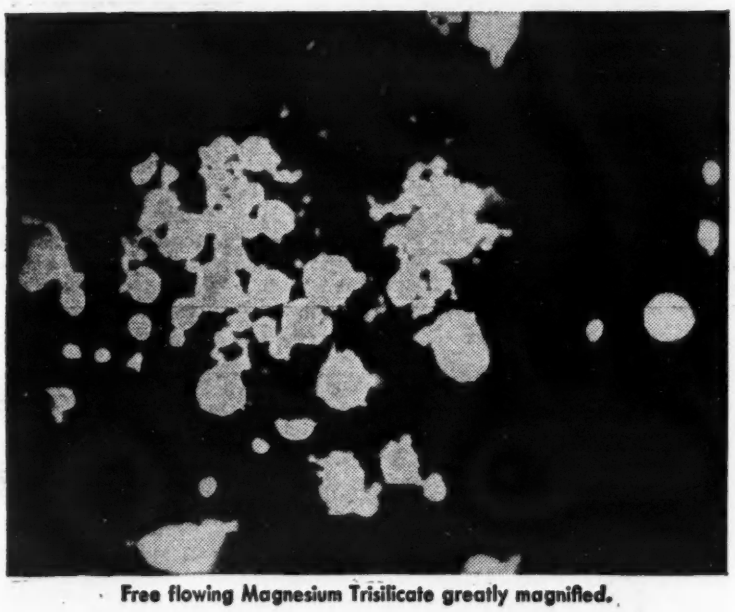

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Drugs, Fine Chemicals

Prices broke sharply on iodides and iodates last week, reflecting lower raw material cost and weak price structure in evidence for many months. Reductions ranged from 10 to 49 cents. Not all sources had announced changes at press time, but it was felt to be merely a matter of processing. Resublimed iodine was reduced 30 cents per pound while sodium iodide declined 44 cents. Potassium iodide, USP, was dropped 47 cents per pound and KI, standard feed mixture, was reduced 46 cents per pound. Calcium iodate declined 49 cents per pound and potassium iodate was reduced 10 cents per pound. Sources had no announcement to make concerning iodoform, but it was expected in some quarters that further action would be taken this week.

A basic producer announced a ¾ cent per pound across the board reduction on technical sodium gluconate reflecting the decline in gluconic acid early in the week. Refined sodium gluconate and other gluconates were unchanged.

Dealers in medicinal alkaloids felt that scarcities in atropine, brucine and strychnine would continue to be severe over the balance of the year. The 8 cent brucine market of two years ago has been replaced by a nominal price of 50 cents per ounce. It was felt that the trend would continue to be upward since prospects of a more adequate supply of brucine being made available to dealers here was very remote.

Aspirin and salicylates were readily available. Sales of these materials were in a gentle decline which, it was felt, would continue until early fall when consumers begin to stock for winter items. Sodium benzoate was moving in good volume and in some areas, makers reported they were running a little snug but overall market was in good balance.

Vitamin prices were unchanged from previous report. Ascorbic acid continued to move in good volume. Antibiotics prices were unchanged. Consumption was seasonally off.

Aspirin—The market continued to level out as a result of seasonal declines in demand. Bulk suppliers had attained a relatively good inventory position, it was said. Price was steady and unchanged.

Brucine—Price was nominal at 50c. per ounce in the absence of any substantial quantities of brucine being made available to dealers here. This was in contrast to a situation barely two years ago when brucine was freely offered at 8c. per ounce. There were rumors that exporters in Europe had offered as much as 80c. for brucine.

Demand was heavy as alkaloid dealers as well as consumers in the alcohol industry have been hard pressed to locate a source of supply.

One report pointed out that sales of aerosol spray products of scalp and hair preparations, deodorants, shampoos, cleaning solutions and disinfectants had doubled and redoubled in recent years and many of these products require the use of SD 40, an alcohol formula controlled by the Alcohol and Tobacco Tax Unit of the Treasury Department. This formula requires the use of 3 ounces of brucine alkaloid or sulfate as denaturant to every 100 gallons of 190-proof alcohol. The denatured alcohol is then diluted to prepare the numerous end-products. SD 39-A, with end-use authorized in many of the aforementioned products, requires the use of 60 ounces of any one of several quinine salts to every 100 gallons of ethyl alcohol. It was pointed out that it was unlikely the price of brucine would go high enough for consumers to make a switch in formulas. There was some speculation as to whether or not the government would step in and offer an alternate denaturant for SD 40.

Supply situation has become increasingly complicated over recent years. Domestic producers of strychnine withdrew from the market as its use faded rapidly in pesticides and rodenticides. One source hastened to point out that strychnine was not exactly a drug on the market today, but the use is small and confined to medicinal purposes and even there, the market has dwindled. Although strychnine and brucine are extracted from nux vomica in about 1:1 ratio, it was pointed out that sales of strychnine were large in comparison to those for brucine. Thus, when manufacture of strychnine stopped, stockpiles of brucine built up over several years were available to bolster the market. However, this source has long been depleted and some reports maintained that India was the sole source of supply, with one report mentioning England as a possibility. German production had been discontinued, at least for the time being, it was said. One report mentioned a package deal, whereby a consumer would be required to take strychnine and brucine together.

Price Trends

Advanced

None

Reduced

Iodine, resublimed, 30c. per lb.
Potassium iodide, 47c. per lb.
Sodium gluconate, ¾c. per lb.
Sodium iodide, 44c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
63.19	63.21	63.21	63.84

For Current Prices See Page 9

Ferric Pyrophosphate—NF granular soluble pearls listed at 79c. per pound, while technical insoluble powder was unchanged at 40½c. per pound in 10,000-pound lots or more. Market was routine.

Iodides—Prices weak for many months broke sharply last week. Producers announced reductions ranging from 10c. to 49c. per pound on iodides and iodates. Declines also reflect lower raw material cost established some time ago.

Sodium iodide, USP, in 300-pound lots, was reduced 44c. per pound from $2.42 to $1.98 per pound.

Potassium iodide, USP, granular, 250 pound container, was reduced 47c. per pound from list of $1.90 to $1.43 per pound. Potassium iodate, 100-pound lots, was dropped 10c. from $1.66 to $1.55 per pound. Potassium iodide, standard mixtures, 90% KI, in 250-pound drums, went from $1.81 to $1.35 per pound, a reduction of 46c. per pound.

Calcium iodate, 200-lb. lots, declined 49c. per pound from $1.92 to $1.43 per pound.

There was no announcement concerning iodoform, but most sources expected further action would take place this week. Not all sources had gone along with the changes, but in a market as weak as this one has been, it was all "a matter of paper work."

Iodine—Resublimed iodine was reduced to $2 per pound last week from a level of $2.30. Price has been weak on iodine and iodides for some time. Some sources had not announced changes at the close of the week, but it was certain that they would meet the new prices.

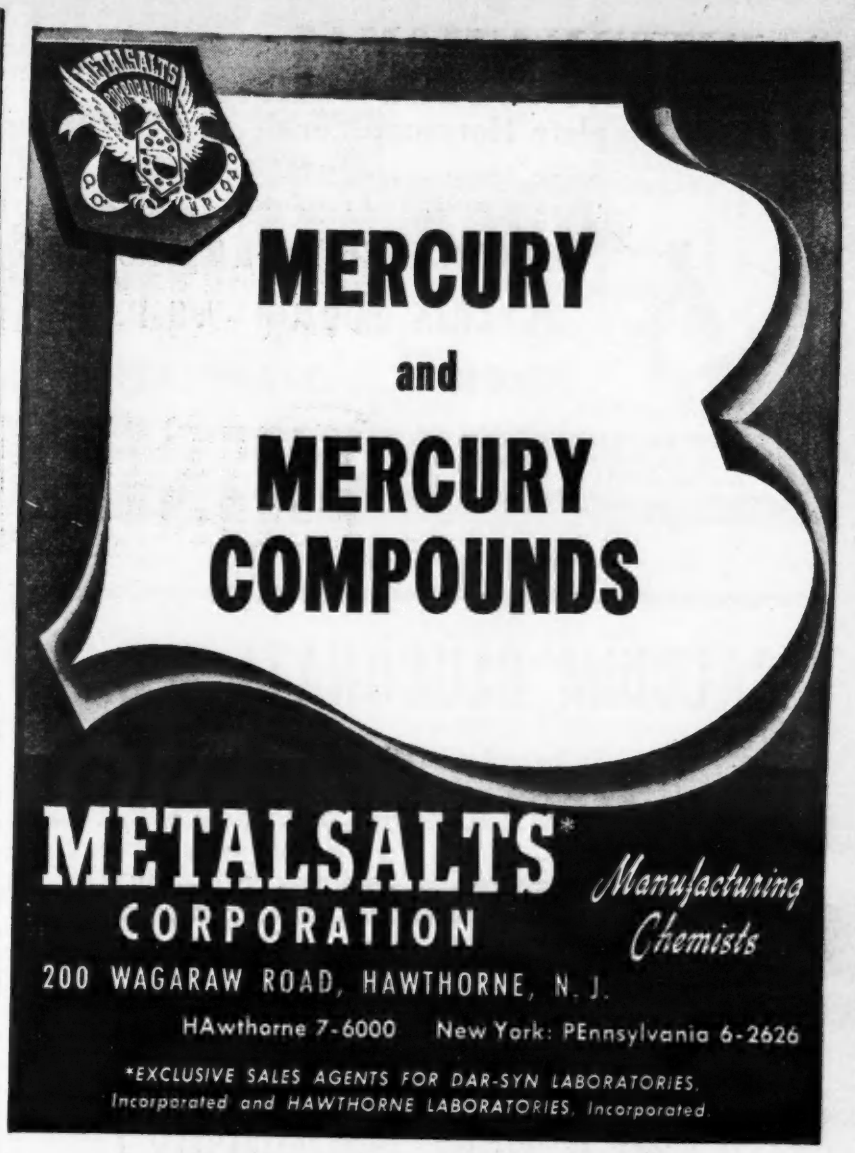
Quinidine Sulfate — Market was unchanged at 74½c. per ounce in 1,000-ounce quantities. Demand has been well maintained, according to trade report of sources contacted last week. Census bureau reported imports of quinidine and salts at 36,661 ounces as against 127,328 ounces in the previous month.

Quinine Sulfate — Demand was said to have held up very well in this market. Price was firm at 27½c. per ounce in 1,000-ounce drum quantities. Imports during February amounted to 104,536 ounces of which 1,000 ounces originated in Great Britain, 51,200 in the Netherlands and 52,336 ounces came from West Germany. Imports in January were 104,024 ounces.

Pyridoxine—Price was unchanged. Market potential continued highly favorable as a result of continued good clinical reports of use of this material in pharmaceuticals for pre-natal care. It was pointed out that work has been done indicating that Vitamin E and pyridoxine may play an important role in controlling cholesterol levels in the blood.

Sodium Gluconate—A basic producer announced a reduction of ¾c. per pound on technical sodium gluconate. The reduction reflects the lower price on gluconic acid established last week. Refined sodium gluconate remained unchanged and was quoted at 84c. per pound in 250-pound drum quantity. Other gluconates were likewise unaffected by the price reduction in acid material.

Under new schedules, technical sodium gluconate was 37c. per pound in 100-



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pound bags; 37½c. per pound in 250-pound drums, and 39c. in 100-pound drums. For carload shipments, subtract 3c. per pound from the foregoing list while lots of 10,000 pounds were 1c. per pound less across the schedule. On shipments west of Denver, the price was 1½c. per pound more.

Botanicals

Crude drug markets continued in the uneven vein that has been characteristic of trading since the middle of last month. Arrivals of new crop cascara segrada were expected at collecting stations late this month. It was felt that wet weather in the northwest reported earlier would not greatly hamper curing operations. Both export and domestic demand has held up well in this market.

Stocks of Ipecac root remained light as supplies arriving here have moved directly into consuming channels. Supply situation on papain remained bleak. Shipments of nux vomica from India have dwindled as domestic makers of strychnine and brucine have withdrawn from the market. Use of nux in the treatment of stock diseases was small, it was said.

Ipecac Root—Material remained in tight supply as shipments from primary centers earlier in the year moved immediately into consuming channels. Sources looked for no relief in the situation until the fall months and a new crop.

Karaya Gum—Dealers looked for no unusual developments in this market. Price for No. 1 continued to range from 40c.-45c. per pound while No. 2 was 34-36c. and No. 3 was 30c.-32c. per pound.

Nux Vomica—Shipments from India have dwindled as domestic producers have dropped out of brucine and strychnine markets. There was said to be some use of nux, as such, in the treatment of stock diseases, but volume was small. Earlier reports had indicated that poor weather conditions at primary source and inadequate collections might cause a tightening in supply. Sources contacted last week indicated that supplies of nux vomica were fully adequate for the modest needs of the trade.

TO ADDRESS AFCA MEETING: Lt. Gen. Arthur G. Trudeau, army chief of research and development, who will deliver the banquet address as the concluding event of the thirteenth annual meeting of the Armed Forces Chemical Association, to be held June 5 and 6 in Atlantic City, N. J.

Chemical Specialties Role In Syntex Merger Clarified

Chemical Specialties Company, New York, will continue under its present management, and will maintain its present name and policy following realignment of various Syntex affiliates under a new holding company, Syntex Corporation.

A Chemical Specialties spokesman last week clarified the company's position in relation to the corporation following an earlier announcement of merger (OPD, 5/12/58).

Chemical Specialties emphasized that the announced changes in Syntex' corporate structure are designed to strengthen the financial position of the affiliated companies, and would not affect existing corporations and activities.

Corn Protein Developed

Corn Products Refining Company, Argo, Ill., has developed a new protein from corn, "Zein G210," that can be effectively dispersed in water by weak alkalies. Up to now strong alkalies with pH of eleven or higher have been required to get a water dispersion of "Zein," the company said. The new modified "Zein" produces hard, grease-resistant films.

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Bids Wanted

Aluminum sulfate, 220,000 lbs., ground, spec. OA-429, Bid No. 3-125, May 21, Bureau of Sport Fisheries, Wildlife Refuge, Carterville, Ill.

Ammonium hydroxide, 16,000 gals., Bid No. 1-2716, June 2, Gen. Services Stores Supply, 700 Robbins Ave., Phila. 11, Pa.

Calcium chloride, 96,950 lbs., dihydrate, tech., Bid No. 134, May 27, Contracting Officer, AMC, Elmendorrf AFB, Anchorage, Alaska.

Chlorine, 164 150-lb. cyls., spec. BBC-120, Bid No. 72, June 5, Base Procurement Office, AMC, Loring AFB, Maine; 57,000 lbs. liquid chlorine, Bid No. 67, May 27, Contracting Officer, AMC, Chanute AFB, Ill.; 32 2,000-lb. cyls. liquid chlorine, fed. spec. BB-C-120, Bid No. 54, June 11, Contracting Officer, Fort Detrick, Frederick, Md.; 100 150-lb. cyls. liquid chlorine, for use in water filtration plant, Bid No. 3-117, May 20, Bureau of Sport Fisheries, Wildlife Refuge, Cartersville, Ill.

Diethyl ether, 900,000 lbs., bulk, grade C, spec. JAN E-199-2, Bid No. 174-66, June 5, Supply Div., Naval Powd. Factory, Indian Head, Md.

Drugs, formic acid, nitric acid, stearic acid, Bid No. M-5-72, May 29, formaldehyde solution, lactose, Bid No. M-5-71, May 27, methyltestosterone tabs., penicillin G tabs., Bid No. M-5-69, May 27, hexachlorophene liq., orange peel, pine oil, Bid No. M-5-70, May 27, Supply Div., V.A. Supply Depot, Somerville, N.J.; 4,200 bots. triasyn B tabs., NF, 1000s, Bid No. 413, May 26, 22,592 bots. liver injection, Bid No. 465, May 20, 19,000 ¼-lb. bots. ethyl nitrate spirit NF, Bid No. 491, May 20, 6,912 bots. alphatocopherol acetate tabs. 25 mg., 3,408 bots. Pentobarbital sodium tabs. NF, 100 mg., 34,328 bots. penicillin G tabs. USP, 250,000 units 100s Bid No. 461, May 23, 500,000 bots. procaine penicillin G USP, 300,000 units, Bid No. 479, May 26, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N.Y.

Ethyl alcohol, 10,000 gals. tech., spec. E-463A, Bid No. 93, June 6, N.Y. Chem. Procurement Div., 290 Broadway, N.Y. 7, N.Y.; 600,000 gals. denatured ethyl alcohol, 190 proof, spec. A-6091, Bid No. 269, May 23, Contracting Officer, Redstone Arsenal, Huntsville, Ala.

Germicide, 720 gals. catonic, alkyldimethylbenzylammonium chloride base, 50% concentrate, Bid No. 50, May 28, Contracting Officer, Fort Detrick, Frederick, Md.

Lime, 3,600 50-lb. paper bgs., high calcium, vertical hydrated, water use, Bid. No. 3-126, May 21, Bureau of Sport Fisheries, Wildlife Refuge, Cartersville, Ill.

Mercury, 5,064 1-lb. bots., NF, Bid No. 483, May 27, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N.Y.

Orthophosphoric acid, 76,800 lbs., tech., Bid No. 392, May 23, Contracting Officer, AMC, Hill AFB, Ogden, Utah.

Paint, 356 gals. orange gloss cellulose nitrate, 5,300 qts. red same, Bid No. 4-2781, May 29, 90,000 gals. soft white, fire retardant, semigloss enamel, Bid No. 4-2765, June 5, 15,450 gals. white cellulose nitrate, Bid No. 4-2745, June 4, 4,000 5-gal. pails antifouling submarine vinyl black paint, Bid No. 4-2749, May 20, 40,000 5-gal. pails vinyl red lead, Bid No. 4-2705, May 22, 650 gals. exterior white primer coating, 2,200 gals. deck enamel, Bid No. 4-2657, May 27, 1,400 gals. black heat resisting glyceryl phthalate enamel, Bid No. 4-2710, June 3, 1,700 gals. interior red deck enamel, Bid No. 4-2666, May 29, 75,500 gals. aircraft enamel, Bid No. 4-2752, June 4, Gen. Services Stores Supply, 700 Robbins Ave., Phila. 11, Pa.

Sodium bisulfate, 31,000 lbs., tech., Bid No. 1-2647, May 29, Gen. Stores Supply Office, 700 Robbins Ave., Phila. 11, Pa.

Sodium chloride, 87,000 lbs., Bid No. 134, May 27, Contracting Officer, AMC, Elmendorrf AFB, Anchorage, Alaska.

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ALUMINUM POWDER—4 dms, Bremen
AMMONIUM BICARBONATE—600 bgs, Chemical Manufacturing Co, Glasgow
AMMONIUM CHLORIDE—2 dms, Rotterdam
ANILINE DYES—47 dms, Sandoz Chemical Works, Havre
40 dms, Putnam Chemical Corp, Hamburg
82 dms, Hensel Bruckmann & Lorbacher, Hamburg
78 dms, Ciba Co, Rotterdam
39 dms, Carbic Color & Chemical Co, Rotterdam
23 dms, Geigy Chemical Corp, Bremerhaven
ANNATTO SEED—56 bgs, Marcel Calvet, Progreso
ANTIMONY OXIDE—500 bgs, National Lead Co, Liverpool
72 bgs, C Gitlan, Antwerp
ANTIMONY REGULUS—759 cs, Mercantile Metal & Ore Corp, Rijeka
ARABIC GUM—762 bgs, Chase Manhattan Bank, Port Sudan
255 bgs, Bank of N Y, Port Sudan
600 bgs, P A Dunkel, Port Sudan
300 bgs, Morningstar Nicol, Port Sudan
256 bgs, Thurston & Braidich, Port Sudan
650 bgs, T M Duche & Sons, Port Sudan
300 bgs, Port Sudan
ARGOLS—682 bgs, Tartaric Raw Materials, Algiers
250 bgs, Tartaric Raw Materials, Naples
ARSENIC—99 bbls, L J Buck, Gothenburg
ARSENIC, METALLIC—37 dms, Belmont Smelting & Refining Works, Gothenburg
ASBESTOS FIBER—4,000 bgs, Johns Manville Corp, Capetown
800 bgs, Lourenco Marques
BARIUM CHLORATE—50 dms, International Selling Corp, Marseille
BARIUM CHLORIDE—400 bgs, Rotterdam
BEEF EXTRACT—40 cs, John Thallon & Co, Brisbane
BEESWAX—182 blks, Strahl & Pitsch, Djibouti
88 bgs, Eastern Mohair Trading Co, Assab
100 bgs, International Commodities Corp, Valparaiso
10 bgs, Machado & Co, Puerto Plata
31 bbls, Cap Haiti
51 bgs, Tampico
BERGAMOT OIL—20 hf/cs, Tombarel Products Corp, Messina
20 hf/cs, Citrus & Allied Essential Oils Co, Messina
BISMUTH—378 cs, Cerrode Pasco Corp, Callao
BLANC FIXE—1,000 bgs, C J Osborn Co, Rotterdam
1,764 bgs, Rotterdam
BOIS DE ROSE OIL—10 dms, Hollander Trading Corp, Callao
5 dms, Lo Curto & Funk, Callao
BRONZE POWDER—44 dms, Leo Uhlfelder Co, Bremen
CALCIUM CARBONATE—1,660 bgs, Antwerp
CALCIUM OXIDE—20 dms, Rotterdam
CALCIUM PHOSPHATE, DIBASIC—800 bgs, Wessel Duval & Co, Antwerp
CALCIUM STEARATE—2 cs, Genoa
CAMPHOR OIL—5 dms, Magnus Mabee & Reynard, Kobe
CANDELILLA WAX—188 bgs, Frank B Ross, Tampico
CARAWAY OIL—2 dms, Magnus Mabee & Reynard, Rotterdam
CARAWAY SEED—100 bgs, Frank Tea & Spice Co, Rotterdam
100 bgs, I Grob, Rotterdam
100 bgs, Levy & Levis Co, Rotterdam
200 bgs, Rotterdam
CARBON FERROMANGANESE—67 dms, Chase Manhattan Bank, Yokohama
CASEIN—1,800 bgs, Pacific National Bank, Melbourne
550 bgs, National City Bank, Melbourne
80 bgs, Durst Manufacturing Co, Rotterdam
2,000 bgs, Brown Bros, Melbourne
4,896 bgs, Melbourne
CASHEWNUT SHELL LIQUID—175 dms, Hooker Electro Chemical Co, Cochin
CASSIA—94 bls, Rotterdam
CELERY SEED—80 bgs, M J Golombeck, Marseille
172 bgs, C Czarinkow, Bombay
80 bgs, Otto Gerdau, Bombay
87 bgs, Fehr Bros, Bombay
87 bgs, M J Golombeck, Bombay
CHESTNUT EXTRACT—1,200 bgs, Barkey Importing Co, Genoa
800 bgs, Tanimex Corp, Rotterdam
400 bgs, Canada Colors & Chemicals Ltd, Rotterdam
CHLORAL HYDRATE—10 dms, Lo Curto & Funk, Liverpool
CINNAMON QUILLS—50 bls, Chase Manhattan Bank, Colombo
25 bls, Louis Furth, Colombo
100 bls, Colombo
123 bls, Rotterdam
CINNAMONBARK OIL—1 cs, Volkart Bros, Colombo
CLAY, BURNT—120 bgs, Markath Trading Co, Liverpool
COALTAR DYES—5 dms, Hensel Bruckmann & Lorbacher, Rotterdam
16 dms, C A Hayes, Rotterdam
6 dms, Putnam Chemical Corp, Hamburg
35 dms, Rotterdam
COD LIVERS—75 dms, Tec Chemical Corp, Bergen
CODLIVER OIL—12 dms, Heckman Meeter Co, Bergen
35 dms, Arista Oil Products Co, Bergen
COPAL GUM—126 bgs, Wm H Scheel, Manila
CORIANDER SEED—375 bgs, Karl H Landes & E Balint, Haifa
160 bgs, Delano Corp of America, Haifa
CORN STARCH—350 bgs, Rotterdam
CRESYLIC ACID—25 tons, H A Gogarty, Liverpool
CUTTLEFISH BONE—100 cs, Chase Manhattan Bank, Kobe
50 cs, Hershey Co, Takoradi
30 cs, Manufacturers Trust Co, Cadiz
100 cs, Kobe
100 cs, Madras
30 cs, Takoradi
DAMMAR GUM—50 cs, Antwerp
DEXTRIN—610 bgs, Manufacturers Trust Co, Rotterdam
150 bgs, Rotterdam
DILLSEED OIL—2 cs, Calcutta
EARTH COLORS—1,665 bgs, Naftone Inc, Bremen
1,450 bgs, Naftone Inc, Rotterdam
15 dms, American Cyanamid Co, Rotterdam
200 bgs, J Lee Smith, Bremen
EPSOM SALT—2,700 bgs, Interstate Universal Inc, Bremen
EUCALYPTUS OIL—119 dms, Malaga
FISHLIVER OIL—1 dm, Bank of California, Yokohama
10 dms, Chase Manhattan Bank, Yokohama
2 dms, Interocean Chemical & Minerals Corp, Yokohama
7 dms, Arista Oil Products Co, Yokohama
7 dms, Kanematsu N Y, Inc, Yokohama
FISHMEAL—805 bgs, Marine & Animal By Products Corp, Callao
870 bgs, Supe
FUEL OIL—339,000 bbls, Esso Standard Oil Co, Aruba
132,236 bbls, Gulf Oil Corp, Puerto La Cruz
259,805 bbls, Metropolitan Petroleum Corp, Punta Cardon
194,876 bbls, Esso Export Corp, Las Piedras
10,000 bbls, Asiatic Petroleum Corp, Curacao
GALL, OX—2 dms, John Thallon & Co, Brisbane
1 dm, J M Rodgers, Madras
GAMMA ACID—62 dms, L & R Organic Products, Rotterdam
40 dms, Kaufman & Vinson, Yokohama
GELATIN—30 dms, Hensel Bruckmann & Lorbacher, Rotterdam
50 bgs, Royal Bank of Canada, Rotterdam
300 bgs, Arles Co, Havre
75 bgs, Irving Trust Co, Leghorn
134 bbls, Antwerp
GERANIUM OIL—1 dm, Fritzsche Bros, Algiers
4 dms, Mane Fils Inc, Algiers
GINGER—80 bgs, A G Dunn, Tuticorin
460 bgs, C M Van Sillevoldt, Cochin
80 bgs, A G Dunn, Cochin
80 bgs, C Czarinkow, Cochin
208 bgs, C H Windschuegl, Freetown
543 bgs, Freetown
GLUE STOCK—976 bls, Transatlantic Animal By Products Corp, Ilo
GLYCERINE—82 dms, R P Casado, Havana
GLYCEROPHOSPHORIC ACID—2 dms, Hudson Shipping Co, Liverpool
GRAPHITE—500 bgs, Asbury Graphite Mills, Colombo
800 bgs, Joseph Dixon Crucible Co, Bremen
GYPSUM—600 bgs, C B Chrystal Co, Liverpool
200 bgs, Whittaker, Clark & Daniels, Liverpool
HASHAB GUM—100 bgs, Murwal Inc, Port Sudan
HELIOTROPIN—2 cs, Van Ameringen Haebler, Yokohama
HEXACHLOROETHANE—200 bgs, American Firstoline Corp, Hamburg
HYDROFLUORIC ACID—2 cs, Antwerp
IODINE, CRUDE—100 bbls, Bunge Corp, Yokohama
IPECAC ROOT—20 bdls, S B Penick & Co, Barranquilla
5 bgs, Meer Corp, Cristobal
IRON POWDER, CRUDE—54 dms, Hensel Bruckmann & Lorbacher, Rotterdam
KARAYA GUM—123 bgs., P A Dunkel, Bombay
61 bgs, Colony Import & Export Corp, Bombay
127 bgs, Morningstar Nicol, Bombay
LACTALBUMIN—220 dms, Chase Manhattan Bank, Rotterdam
220 dms, Rotterdam
LACTOSE—120 bgs, Hamburg
LAVENDER OIL—53 dms, Malaga
LAVENDER OIL, SPIKE—11 bbls, L A Champon & Co, Barcelona
LEMON OIL—36 hf cs, Lo Curto & Funk, Messina
5 hf cs, Messina
LEMONGRASS OIL—13 dms, Cochin
LICORICE EXTRACT—151 bgs, Izmir
333 cs, Izmir
LIME OIL—1 dm, Lo Curto & Funk, Tampico
1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
LITHIUM CARBONATE—91 bbls, Lo Curto & Funk, Santos
LIVER PASTE—2 dms, Tec Chemical Corp, Montevideo
LIVER POWDER—19 dms, Tec Chemical Corp, Montevideo
LOCUST BEAN GUM—101 bgs, T M Duche & Sons, Portimao
336 bgs, Hanover Bank, Portimao
100 bgs, Bank of N Y, Valencia
100 bgs, Irving Trust Co, Valencia
300 bgs, Meer Corp, Portimao
100 bgs, Colony Import & Export Corp, Hamburg
LOCUST BEAN POWDER—250 bgs, Wm M Allison & Co, Messina
MACE—28 cs, Karl H Landes & E Balint, Singapore
32 cs, Hismoco American Co, Singapore
MAGNESIUM CARBONATE—40 cs, Lo Curto & Funk, Antwerp
MANNA—10 cs, Meer Corp, Palermo
5 cs, Chase Manhattan Bank, Palermo
MERCURIC OXIDE, YELLOW—5 dms, Rijeka
MERCURY—30 flks, Lo Curto & Funk, Tampico
50 flks, Barranquilla
240 flks, Cadiz
MINERAL COLORS—30 dms, Revelli Chemical Co, Hamburg
MOLASSES—555 tons, W R Grace & Co, Salaverry
MUSTARD SEED—78 bgs, Louis Furth, Copenhagen
MYRRH GUM—32 bgs, Lo Curto & Funk, Aden
NAPHTHENIC ACID—180 dms, Imperial Oil Ltd, Barranquilla
NAPHTHOL—16 dms, Hensel Bruckmann & Lorbacher, Hamburg
NICOTINE SULFATE—4 dms, Conray Products Co, Rotterdam
NUTMEG—70 bgs, Karl H Landes & E Balint, Singapore
35 bgs, P H Petry, Singapore
OCOTEA CYMBARUM OIL—50 dms, American Metagraph Co, Itajai
OLIVE OIL—52 dms, Lionelli Packing Co, Piraeus
27 dms, Aeolian Shipping Co, Piraeus
52 dms, First National Boston, Barcelona
25 dms, Standard Products Co, Piraeus
104 dms, J Ossola Co, Piraeus
311 dms, Uddo & Taormina, Piraeus
52 dms, S A Laraja & Sons, Piraeus
50 dms, Mercantile Trust Co, Piraeus
25 dms, Smith Weihman Co, Piraeus
101 dms, A N Cory, Piraeus
104 dms, Hanover Bank, Iraklion
19 dms, Commercial Credit Bank Athens, Patras
50 dms, C Orlando, Palermo
50 dms, Uddo & Taormina Co, Palermo
25 dms, Antonio Corrao Corp, Palermo
53 dms, Swiss Credit Bank, Barcelona
173 dms, Manufacturers Trust Co, Barcelona
37 dms, Chase Manhattan Bank, Barcelona
129 dms, Swiss Credit Bank, Iraklion
103 dms, Hanover Bank, Suda Bay
83 dms, Manufacturers Trust Co, Suda Bay
25 dms, Marine Midland Trust Co, Seville
50 dms, Swiss Credit Bank, Seville
181 dms, National City Bank, Suda Bay
100 dms, Uddo & Taormina, Seville
25 dms, Barcelona
104 dms, Suda Bay
OPIUM—63 cs, Merck & Co, Istanbul
ORANGE OIL—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
ORIGANUM—77 bls, Louis Furth, Trieste
ORRIS ROOT—34 bgs, Irving Trust Co, Leghorn
PALMKERNEL OIL—139 dms, BMT Commodity Corp, Rotterdam
341 tons, Balfour Guthrie, Matadi
340 tons, E F Drew & Co, Matadi
325 tons, Matadi
418 tons, Ango Ango
PAPAIN—20 cs, Chas L Huisking & Co, Mombasa
20 cs, S B Penick & Co, Dares Salaam
23 cs, Bemo Shipping Co, Dares Salaam
20 cs, National City Bank, Dares Salaam
82 hf chts, Chas L Huisking & Co, Colombo
34 hf chts, Chas L Huisking & Co, Colombo
61 cs, Mombasa
PAPRIKA—750 bgs, R F Downing, Alicante
500 bgs, J Weinstein, Alicante
100 bgs, P H Petry, Alicante
200 bgs, A A Sayia, Alicante
1,050 bgs, Alicante
200 bgs, Rijeka
PAPRIKA EXTRACT—28 dms, Alicante
PEANUT OIL—200 tons, E F Drew & Co, Rotterdam
PEATMOSS—2,000 bls, E J Lang, Bremen
600 bls, New Amsterdam Import Co, Bremen
1,000 bls, Ascot Peatmoss Corp, Bremen
1,350 bls, American Express Co, Bremen
2,600 bls, E Dunwoody, Bremen
1,200 bls, New Amsterdam Import Co, Aarhus
1,000 bls, Premier Peatmoss Corp, Copenhagen
500 bls, Marine Midland Trust Co, Bremen
3,790 bls, Premier Peatmoss Corp, Bremen
5,500 bls, J E Bernard, Bremen
1,000 bls, Halfmoon Trading Co, Rotterdam
1,450 bls, Wertsville Industries, Bremen
PENNYROYAL OIL—11 dms, Malaga
PEPPER, BLACK—140 bgs, Daarnhower & Co, Singapore
770 bgs, A G Dunn, Singapore
140 bgs, Internatio Rotterdam, Singapore
140 bgs, J F Frank, Singapore
700 bgs, C M Van Sillevoldt, Singapore
80 bgs, Otto Gerdau, Colombo
160 bgs, A G Dunn, Cochin
160 bgs, Reliable Mercantile Co, Cochin
40 bgs, P H Petry, Singapore
700 bgs, C Czarinkow, Singapore
560 bgs, Singapore
160 bgs, Alleppey
80 bgs, Cochin
PEPPER, RED—125 bgs, Daiichi Bussan Kaisha, Kobe
PEPPER, WHITE—140 bgs, A G Dunn, Singapore
140 bgs, Singapore
PETITGRAIN OIL—11 dms, National City Bank, Buenos Aires
PETROLATUM—2 dms, Industrial Raw Materials, Rotterdam
PETROLEUM, CRUDE—247,286 bbls, Esso Standard Oil Co, Las Piedras
511,491 bbls, Socony Mobil Oil Co, Puerto La Cruz
255,000 bbls, Esso Standard Oil Co, Puerto La Cruz
143,491 bbls, Cities Service Oil Co, La Salina
PIMENTOLEAF OIL—6 dms, Fritzsche Bros, Kingston
POLLACKLIVER OIL—5 dms, Chase Manhattan Bank, Yokohama
10 dms, National City Bank, Yokohama
65 dms, Interocean Chemical & Minerals Corp, Yokohama
POLYETHYLENE—6 bgs, Monsanto Chemical Co, Haifa
36 bgs, Goodrich Gulf Chemicals Inc, Bremen
POLYGLYOXAL—2 dms, Dr F Jonas Co, Marseille
POLYVINYL ALCOHOL—50 bgs, Marubeni Iida Inc, Kobe
POLYVINYL CHLORIDE—1,000 bgs, Judson Sheldon, Yokohama
POLYVINYL CHLORIDE RESIN—5,000 bgs, Daiichi Bussan Kaisa, Yokohama
POPPY SEED—100 bgs, Rotterdam
POTASSIUM CHLORIDE—67 bgs, Lo Curto & Funk, Bremen
POTASSIUM METABISULFITE—100 dms, H Reifenberg, Rotterdam
PSYLLIUM SEED—20 bgs, S B Penick & Co, Marseille
PSYLLIUM SEED HUSKS—311 bgs, S B Penick & Co, Bombay
PYRETHRUM EXTRACT—10 dms, Balfour Guthrie, Matadi
35 dms, Matadi
PYRETHRUM FLOWERS—200 bls, Chemical Insecticides Corp, Rijeka
PYRIDINE—20 dms, H A Gogarty, Liverpool
33 dms, Rotterdam
QUININE SULFATE—10 dms, Hamburg
RAPESEED—200 bgs, Hinton & Co, Rotterdam
500 bgs, Hartz Mountain Products, Rotterdam
RAUWOLFIA ROOT—36 bgs, Calcutta
RICE STARCH—393 bgs, American Key Products, Trieste
ROSEMARY OIL—3 dms, Seville
SABADILLA SEED—120 bgs, Prentiss Drug & Chemical Co, La Guaria
SACCHARIN—25 dms, H A Gogarty, Rotterdam
20 dms, Leviant & Co, Rotterdam
SALICYLIC ACID—40 dms, Baird Chemical Corp, Rotterdam
40 dms, Rotterdam
SANDALWOOD—118 bgs, George Lueders & Co, Madras
236 bgs, George Lueders & Co, Yokohama
SANDALWOOD OIL—17 cs, Agriscent Corp, Cochin
SARSAPARILLA ROOT—61 bls, Tampico
SEAWEED EXTRACT—20 cks, National City Bank, Aarhus
SEEDLAC—400 bgs, Wm Zinsser & Co, Calcutta
300 bgs, Gillespie Rogers Pyatt, Calcutta
250 bgs, Gillespie Rogers Pyatt, Bangkok
2,100 bgs, Calcutta
SELENIUM METAL POWDER—17 cs, Montanore Inc, Yokohama
SHARKLIVER OIL—2 dms, Arista Oil Products Co, Yokohama
SHELLAC—27 dms, F H Paul & Stein Bros, Rotterdam
100 bgs, C H Timm, Calcutta
150 bgs, United Shellac Corp, Calcutta
1,650 bgs, Calcutta
SOAP BARK—293 bgs, S B Penick & Co, San Antonio
SODIUM ACETATE—3 dms, Gedeon Richter Pharmaceutical Products, Hamburg
SODIUM CHLORITE—50 dms, Rotterdam
SODIUM FLUORIDE—112 bgs, Liverpool
SODIUM PERBORATE TETRAHYDRATE—2,200 bgs, Chemical Manufacturing Co, Liverpool
SODIUM SULFATE, ANHYDROUS—2,340 bgs, Antwerp
SPERM OIL—288 tons, Archer Daniels Mildand Co, Paita
STRYCHNINE—4 cs, Lo Curto & Funk, Liverpool
TALC—18,300 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—600 bgs, American Key Products, Itajai
5,152 bgs, Morningstar Nicol, Bangkok
2,600 bgs, Bangkok
1,141 bgs, First National Boston, Bangkok
TARTARIC ACID—150 dms, Frank Samuel & Co, Marseille
60 kgs, Byron Chemical Co, Palermo
300 bgs, Palermo
THYME—40 bgs, Karl H Landes & E Balint, Marseille
THYME OIL—17 dms, Malaga
TOLU BALSAM—25 cs, National City Bank, Barranquilla
TURMERIC—400 bgs, Mincing Trading Corp, Cochin
160 bgs, C M Van Sillevoldt, Cochin
16 bgs, C Czarinkow, Cochin
80 bgs, A G Dunn, Cochin
80 bgs, Otto Gerdau, Cochin
320 bgs, Alleppey
UREA—1,000 bgs, Nylos Trading Co, Genoa
VETIVER OIL—1 dm, L A Champon & Co, Port Au Prince
VITAMIN B,—14 cs, Sumintomo Shoji N Y Inc, Kobe
WOOL GREASE—107 dms, Chase Manhattan Bank, Melbourne
ZINC OXIDE—700 bgs, Imperial Paper Co, Vera Cruz
1,600 bgs, Rotterdam
ZINC SULFIDE—800 bgs, C J Osborn Co, Rotterdam
ZIRCON—3,600 bgs, International Titanium Corp, Brisbane
4,000 bgs, Lo Curto & Funk, Brisbane

Los Angeles

ASBESTOS FIBER—500 bgs, African Agency, Capetown
2,560 bgs, Johns Manville Corp, Capetown
500 bgs, Perryman-Mojonier Co, Lourenco Marques
1,000 bgs, Johns Manville Corp, Lourenco Marques
4,000 bgs, D H Lyons Co, Lourenco Marques
800 bgs, Lourenco Marques
CASEIN—400 bgs, Synkoloid Co, Buenos Aires
500 bgs, Borden Chemical Co, Buenos Aires
100 bgs, Eugenio Lang, Buenos Aires
800 bgs, A J Mills & Co, Auckland
COPRA—1,250 tons, American Trust Co, Zamboanga
750 tons, American Trust Co, Surigao
500 tons, American Trust Co, Tacloban
350 tons, American Trust Co, Cebu
500 tons, Cargill Inc, Cebu
COPRA CAKE—2,240 bgs, Snow & Co, Manila
6,240 bgs, Pacific Vegetable Oil Corp, Manila
6,480 bgs, Balfour Guthrie, Manila
2,240 bgs, J W Campbell, Manila
FISHLIVER OIL—102 dms, Universal Foreign Service, Yokohama
2 dms, Interocean Chemical & Minerals Corp, Yokohama
HOOFMEAL—292 bgs, International Packers Ltd, Montevideo
KELPMEAL—200 bgs, N K M Importing Co, Oslo
200 bgs, N K M Importing Co, Stavanger
LOCUST BEAN GUM—100 bgs, H P Rossiger, Bremen
MOLASSES—2,726 tons, Pacific Molasses Co, Bampo
OLIVE OIL—104 dms, Swiss Credit Bank, Malaga
122 dms, Malaga
PAPAIN—18 cs, Dar es Salaam
PEPPER, BLACK—140 bgs, C Czarinkow, Singapore
20 bgs, Grace & Co, Singapore
230 bgs, Singapore
PEPPER, RED—100 bgs, S L Jones & Co, Kobe
325 bgs, Cal Compact Foods, Kobe
100 bgs, M S Cowen, Kobe
PEPPER, WHITE—140 bgs, Borneo Sumatra Trading Co, Singapore
PETROLEUM, CRUDE—40,032 tons, Texaco Co, Rastanura
57,922 tons, Standard Oil Co, Sungai Pakning
SUNFLOWER OIL—52 dms, Malaga Oil Products Co, Buenos Aires
TAPIOCA FLOUR—1,000 bgs, Morningstar-Paisley, Bangkok
3,024 bgs, Stein Hall & Co, Bangkok
2,000 bgs, Morningstar-Paisley, Djakarta
WHITING—2,800 bgs, Pluess Staufer, Rotterdam
WOOL GREASE—25 dms, Hull

Philadelphia

ANTIMONY OXIDE—200 bgs, C Gitlan, Antwerp
ANTIMONY REGULUS—100 cs, C Gitlan, Antwerp
ASBESTOS FIBER—500 bgs, Carey Manufacturing Co, Lourenco Marques
1,600 bgs, Chas Kurz Co, Lourenco Marques
600 bgs, Marine Midland Trust Co, Lourenco Marques
500 bgs, Lourenco Marques

BALL CLAY—100 tons, United Clay Mines, Avonmouth
900 bgs, United Clay Mines, Avonmouth
980 bgs, Paper Makers Co, Avonmouth
515 tons, Moore & Munger, Avonmouth
CALCIUM PHOSPHATE, DIBASIC—800 bgs, Antwerp
CASEIN—300 bgs, Transatlantic Animal By Products Corp, Gdynia
CHESTNUT EXTRACT—700 bgs, Barkey Importing Co, Genoa
CHINA CLAY—1,220 bgs, Paper Makers Co, Fowey
1,508 tons, Paper Makers Co, Fowey
10,680 bgs, English China Clay Sales Corp, Fowey
3,156 tons, Moore & Munger, Fowey
5,497 bgs, Higman Co, Fowey
518 tons, Higman Co, Fowey
FUEL OIL—115,910 bbls, Atlantic Refining Co, Curacao
GYPSUM, CRUDE—4,425 tons, U S Gypsum Co, Little Narrows
11,415 tons, National Gypsum Co, Halifax
IRON POWDER—50 dms, Easton Metal Co, London
MAGNESITE—1,830 tons, Sibenik
MAGNESIUM OXIDE—300 bgs, Darlington Chemical Co, London
300 bgs, Darlington Chemical Co, Glasgow
MOLASSES—1,100,868 gals, Publicker Co, Matanzas
1,849,121 gals, Publicker Co, Sagua
2,954,365 gals, Publicker Co, Nuevitas
OSSEINE—363 bgs, Kind & Knox Co, Antwerp
PEATMOSS—1,500 bls, New Amsterdam Import Co, Aarhus
1,000 bls, E Dunwoody, Bremen
1,000 bls, Premier Peatmoss Corp, Bremen
400 bls, New Amsterdam Import Co, Bremen
2,200 bls, Keer Maurer, Bremen
PETROLEUM, CRUDE—561,270 bbls, Gulf Oil Corp, Puerto La Cruz
127,298 bbls, Gulf Oil Corp, Mena Al Ahmadi
134,299 bbls, Gulf Oil Corp, Banias
195,072 bbls, Gabriel Oil Co, Sidon
127,018 bbls, Socony Mobil Oil Co, Naples
120,944 bbls, Texas Oil Co, Puerto La Cruz
125,187 bbls, Atlantic Refining Co, Amuay Bay
283,118 bbls, Atlantic Refining Co, Pamatacual
POTASSIUM SILICATE—907 bgs, Electrical Products Co, Rotterdam
SODIUM NITRATE—2,500 tons, Guaranty Trust Co, Tocopilla
UREA—4,000 bgs, Nylos Trading Co, Genoa
VANILLA BEANS—50 cs, Zink & Trieste, Vera Cruz
ZINC OXIDE—1,400 bgs, Pigment Chemical Co, London

San Francisco

AMMONIUM BICARBONATE—30 dms, C M C Chemicals Inc, Hull
CALCIUM CARBONATE—1,600 bgs, Antwerp
CALCIUM NITRATE—20,000 bgs, Wilson & Geo Meyer & Co, Heroya
CARAWAY SEED—100 bgs, B C Ireland, Rotterdam
CASSIA—202 bls, Rotterdam
COPRA—5,000 bgs, Berger & Plate Co, Cebu
1,000 tons, Sargill Inc, Subic Bay
500 tons, Toftmans Corp, Subic Bay
GINGER—40 bgs, Spice Islands Co, Kingston
HERRINGMEAL—2,000 bgs, Wilbur Ellis Co, Stavanger
LOCUST BEAN GUM—50 bgs, Hathaway Allied Products, Genoa
OLIVE OIL—50 dms, M Parodi, Leghorn
62 dms, G Oberti & Sons, Genoa
254 dms, Barcelona
52 dms, Cadiz
PAPRIKA—20 bgs, Schoenfeld & Sons, Rotterdam
PETROLEUM, CRUDE—36,088 tons, Standard Oil Co, Ras Tanura
25,221 tons, Standard Oil Co, Sungai Pakning
QUEBRACHO EXTRACT—25 bgs, H J Boutin & Son, Malmo
SODIUM CYANIDE—357 dms, C M C Chemicals Inc, Hull
TRICHLOROETHYLENE—50 dms, D M Hicks Co, Rotterdam
UREA—6,250 bgs, Wilson & Geo Meyer & Co, Heroya
WATTLE EXTRACT—75 bgs, H J Boutin & Sons, Malmo
WOOL GREASE—35 dms, Hull

Stauffer Acquires Anderson

—*Continued from page 4*

are now being produced by Anderson in pilot plant quantities.

Stauffer's research interests in the organic compounds of boron and silicon have been similar to those of Anderson, and it is planned to intensify research and development on these compounds.

Anderson will operate as a Stauffer subsidiary under the management of its founder, Amos R. Anderson as president. Harold G. Deters, secretary of the company, will continue as its director of sales.

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A new monomer for pilot studies

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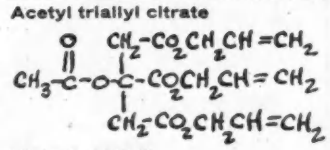
(with 0.01% Hydroquinone)

Acetyl Triallyl Citrate (ATAC) is now available in pilot quantities for investigational use. This new monomer will homopolymerize at 70-80°C. with 1-2% peroxide catalyst. ATAC also will copolymerize with other monomers and will cross-link with unsaturated polyester resins. ATAC is miscible in all proportions in Acetone, Benzene, Chloroform, Glacial Acetic Acid, Methanol, Ethanol, and Isopropanol.

Acetyl triallyl citrate



Mol. wt. 354.3

Tentative specifications:
Boiling Range: 142-143°C. (at 0.2 mm. Hg)
Flash Point: 171-174°C.
Specific gravity at 20°C.: 1.140 gms./ml.
Refractive Index: $n^{25°C}$ D 1.4665

Information presented above is believed to be accurate but carries no guarantee of responsibility on the part of the Sumner Chemical Company. In addition, none of this information can be taken as a recommendation to use the materials as described in violation of existing or future patents.

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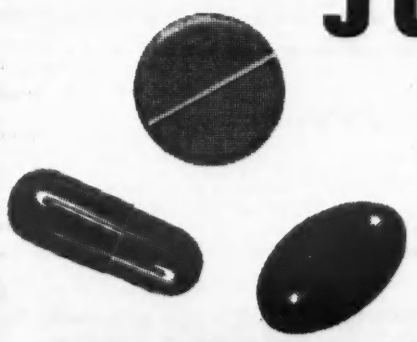

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X-1

General Mills Is Offering Releasing Agent for Plastics

General Mills, Inc., has something new for the producers of injection molded plastics. It is a unique type mold release agent which is designed specifically for use on plastic parts to be decorated.

Trademarked "ReleasaGen H-15-1," the product is designed specifically for use on plastic parts to be decorated. It was developed in cooperation with members ot the plastics industry.

One of the chief advantages of the new product is that it permits decorating of molded plastic items without further preparation. Parts may be painted, vacuum metallized, hot stamped, or printed immediately, with excellent results.

The company reports that use of the new release agent has increased output from 200 percent to 300 percent on many injection molding machines handling difficult jobs. The increase came partly from the ease with which parts were removed from the molds and partly from the unusually large number of cycles possible between applications of "ReleasaGen H-15-1."

A mild rust preventative, the new release agent has shown that it helps keep injection molds in good working condition. It does not build up in the mold and cannot foul cams or knock-out pins.

"ReleasaGen H-15-1" is said to perform exceptionally well with the following resins: nylon, polystyrene, vinyls, styrene-acrylonitrile copolymers, cellulose butyrate, and acrylics. Particularly outstanding performance has been observed with nylon, the company reports.

The new release agent will be marketed by General Mills in both aerosol cans and bulk solution.

Fritzsche Bros. Develops A New Pepper Oleoresin

Fritzsche Brothers, Inc., New York, has a new form of oleoresin black pepper. The product is different in appearance, according to Fritzsche, from the regular grade of oleoresin black pepper in that it is a free-flowing dark brown, homogeneous liquid from which no crystals of piperine will precipitate, even under refrigeration.

Gov't Vaccine Pricing

—Continued from page 5

Laboratories, Philadelphia, a division of American Home Products Corporation; Merck & Co., Rahway, N. J., and Parke, Davis & Co., Detroit, Mich.

The indictment charges that the defendants, who were the sole producers of polio vaccine in the United States during the period covered by the indictment, conspired to fix prices and eliminate competition on sales of polio vaccine to the federal government, to the territories and states of the United States, and to local governmental bodies.

Large Amounts Purchased

It is alleged that large amounts of polio vaccine were purchased by governmental authorities throughout the country from the time that the success of the vaccine was announced in April, 1955, up to the time of the return of the indictment.

From the commencement of production until December 31, 1957, industry-wide shipments of the vaccine by manufacturers were in excess of 205 million cubic centimeters, having a value of about $125 million. Of this amount, approximately 103.5 million cubic centimeters consisted of sales to public authorities.

The bulk of these sales were made under the polomyelitis vaccination assistance act of 1955, under which $53,600,000 was allocated to the states for the purchase of the vaccine and the administration of vaccination programs.

FMC CONTROLLER: Kenneth H. Wanderer, made controller of the chemical divisions of Food Machinery & Chemical Corporation, New York.

Assistant Attorney General Victor R. Hansen, in charge of the antitrust division, in commenting on the return of the indictment, stated:

"A substantial victory over the disease of polio was won when the success of Salk vaccine was announced in 1955. In the distribution and sale of this vaccine, which is so vital to safeguard the health of the nation, we must ever be alert to insure that there is no collusion among producers to raise or maintain prices at artificial levels.

"The indictment returned today charges that vaccine producers have combined to submit uniform bids to public agencies, to adopt non-competitive terms and conditions of sale, and to establish uniform pricing methods. Price fixing activities involving such a significant industry and such substantial sales require criminal action by the department."

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Essential Oils, Aromatics

Activity on the essential oils market last week was said to be sluggish. Bourbon geranium oil felt a sharp price rise. Offers at source were limited and rising. Reason for the increase was stated as being crop damage as a result of severe storms on the Reunion Islands. Some resistance probably will be displayed to this rise, but the trend is predicted to continue upward. The citrus oils remained in bad straits last week. Grapefruit oil advanced due to increased seasonal demand and small stocks. Orange oil remained very firm, and stocks continued to dwindle. Tangerine has had no price advance of late, but that market is also hard hit.

Declining oils on the market last week were sweet almond, anise, eucalyptus, lemongrass, and petitgrain oils. Almond oil was said to be falling back to its level a year ago. Demand was slight for anise oil and thus the decrease. Eucalyptus oil has been on the downward move for about a month now due to lack of business. As well as lower spot prices, shipping prices of lemongrass oil were softer at source for June and July offerings.

The mint oils had no price shifts last week. Prices of midwestern peppermint oil were firmer than far western prices due to farming conditions which are better in the far west than in the midwest. Supplies of both peppermint and and spearmint oils were reported to be none too plentiful, and the market bears watching.

The aromatic chemicals market was quiet last week. Some producers advanced their prices of rhodinol due to the upward move in Bourbon geranium oil price. Geraniol was steady with no furthering in the cutback of prices a months ago. Alpha and beta ionones were also unchanged after a decline two weeks ago. It was reported that aromatic chemicals used in perfume compounds were meeting with a fair amount of demand last week.

Most materials on the seeds and spices market were depressed last week. The one firm spot persisted to be cassia with poppy seed a potential strong spot. Cassia prices were entirely nominal with some dealers giving prices only upon request. Stocks on spot are dwindling rapidly, and it is predicted that situation in Sumatra will cause business with that source to be stopped for some time. Saigons production every year is nowhere near the consumption rate of cassia, so that market will not be of much help.

Poppy seed, Dutch and Polish, were unchanged but firm. Cardamoms, Guetemala and Alleppey decorticated, were both somewhat higher in price last week.

Offtake of pepper was slight last week, and prices were slightly lower. Prices were lowered in hopes of having dock goods removed before it is necessary to put them in storage.

A London market report stated that little activity took place during the last weeks of last month. Scarcity here of orange oil has also affected the London market. Rosemary was said to be in very short supply and prices higher.

Price Trends

Advanced

Cardamoms, Guatemala decorticated, 15c. per lb.
Alleppey decorticated, 10c. per lb.
Cassia, Padang "A," 3c. per lb.
"B," 3c. per lb.
"C," 4c. per lb.
Korintje "A," 3c. per lb.
"B," 3c. per lb.
"C," 4c. per lb.
Geranium oil, Bourbon, $2.50 per lb.
Grapefruit oil, Florida, 30c. per lb.

Reduced

Almond oil, sweet, 25c. per lb.
Anise oil, 25c. per lb.
Eucalyptus oil, 70-75%, 1c. per lb.
80-85%, 1c. per lb.
Fennel seed, French light, ½c. per lb.
Lemongrass oil, 5c. per lb.
Pepper, Malabar black, ½c. per lb.
Lampong black, ¼c. per lb.
Muntok white, ½c. per lb.
Petitgrain oil, South American, 5c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
145.58	145.30	145.79	144.93

For Current Prices See Page 9

Essential Oils

Almond—Natural bitter almond oil was steady last week while the sweet oil declined 25c. to a new listing of 90c. to $1.40 per pound. The past level for sweet almond oil was around 50c. so this price decline has brought the market more in line with what it used to be.

Anise—This oil was reported to be lower in price last week. The decline of 25c. was attributed to slight demand of late. The new listing for anise oil was ranged at $2 to $3.80 per pound.

Citronella—Offerings of the oil from Formosa were reported to be lower again last week for shipments in August and September. Prices on spot remained unchanged at 65c. to $1.18 for Ceylon citronella oil, $1.10 to $1.15 for Java variety, and 75c. to 95c. per pound for Java type oil.

Eucalyptus—This oil continued to follow a trend of downward prices last week, a source reported. Eucalyptus oil, 70-75 percent fell 1c. to a new spot price of 64c. to 80c. while 80-85 percent grade eased 1c. to a listing ranging from 71c. to 95c. per pound. Lack of demand was said to be the cause of the continuing weaker prices.

Geranium—This oil continued to be one of the few oils to display strength on the essential oils market. Offers at source were limited last week and were seen to be steadily rising in price. The firm listings were attributed to bad weather conditions which damaged the crops on the Reunion Islands. Prices of Algerian geranium oil remained the same with a range of $14.50 to $17.50 per pound. Bourbon geranium oil advanced sharply $2.50 to a new listing of $17 to $19.75 per pound. Resistance by soapers to this increase is predicted, but this will not influence the future trend which will probably continue in an upward direction due to the crop damage in March and April, sources said.

Grapefruit—Another citrus oil to advance its prices was grapefruit oil. The same situation holds true for this oil. The frosts in Florida in the beginning of the year damaged the grapefurit crops, and supplies are scarce. The oil advanced 30c. on spot to a new listing which ranged from $2.20 to $2.75 per pound.

Lemongrass—Prices were reported to be lower last week. Listing of lemongrass oil declined 5c. to a spot quote of $1.10 to $1.50 per pound. It was also noted that shipping prices of lemongrass oil were softening due to lower offerings for June and July.

Nutmeg—Listings were unchanged last week, sources reported, but the oil appeared to be softening gradually. East Indian nutmeg oil was priced at a range of $12 to $15.75 while East Indian oil was quoted as ranging from $13 to $15.75 per pound.

Orange—Stocks of orange oil continued to dwindle at a rapid rate last week, sources reported. Prices were exceedingly firm. Many orange oil specialities have been advanced in price, it was noted. California orange oil was quoted at a range of $2 to $2.35 per pound while Florida oil was listed at a range of $1.50 to $2.30.

Peppermint—Prices showed no change last week, sources said. Midwestern oil was said to display some strength while offerings from the far west were lower. The reason for higher prices in the midwest is only fair growing conditions. Supplies of peppermint oil were none too plentiful last week, and new crop will not be available for several months. Natural peppermint oil was listed at a range of $3.60 to $5.10 while redistilled oil ranged from $4 to $5.60.

Petitgrain—A price decrease was noted for petitgrain oil last week, sources said. The oil eased 5c. on spot to a new listing ranging from $2.45 to $2.95 per pound.

Spearmint—No shift in prices was noted for this mint oil. Prices were quoted at a range of $3.65 to $4.80. Stocks of spearmint oil were said to be low so this market may tighten in the future.

Tangerine—This citrus oil, like all other citrus oils, was firm on spot last week. With seasonal demand becoming more active, supplies are dwindling. Prices on

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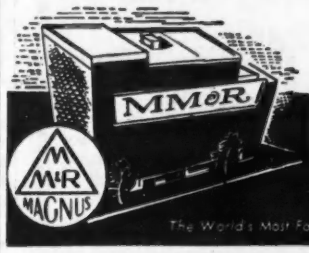

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Essential Oils

spot for Florida tangerine oil held a range last week of $3 to $3.50 per pound.

Aromatic Chemicals

Ethyl vanillin—Prices of ethyl vanillin were steady last week, a source said. Spot listings for 100 pound fiber drums in 500 pound lots or over was $6.40 per pound. For 100 pound fiber drums in smaller lots, the range was $6.65 to $6.95, and 25 pound containers were listed at $7.65 per pound.

Geraniol—About a month ago, several aromatic chemicals derived from citronella eased in price. A continuing display of soft prices was said to be the cause. Since then, geraniol has remained the same at a listing of $2.50 to $3.

Heliotropine—Last week, prices remained unchanged, it was reported. Listings of heliotropine in 100 pound lots held a range of $2.65 to $3 per pound.

Ionone—Two weeks ago, reduction was put into effect for both alpha and beta ionone. The reason was a price adjustment due to the economies of larger production volume. The new listing of alpha ionone standard ranged from $4.15 to $4.70 per pound last week while beta ionone held a listing of $4.50 to $4.90.

Rhodinol—Prices stayed unchanged last week for this aromatic chemical used in perfume compounds, a source said. Some producers upped their prices of this material due to the increase in price of Bourbon geranium oil. The listing stayed at a range of $33 to $41 per pound.

Seeds and Spices

Cardamoms—Two grades of cardamoms advanced last week. Guatemala decorticated cardamoms rose 15c. on spot to a new listing of $2.90. Alleppey decorticated cardamoms also had a new listing of $2.90 which was a 10c. price increase.

Cassia—Reports last week said that spot stocks were shrinking steadily. The situation in Sumatra is unknown, but sources predict that business with Sumatra will not be able to be resumed for some time. Some small reserves of cassia may appear on the market as the prices increase.

Pepper—Prices were slightly softer last week for all grades of pepper as the offtake was small. Releases of dock goods obliged the spot market to fall in an effort to dispose of the merchandise on the docks before storage became necessary. Shipment prices, however, were unchanged in India and Singapore. Therefore, the margin between spot prices, afloat prices, and future deliveries narrowed.

Malabar black pepper declined slightly, ½c. per pound to a new listing of 25¾c., and Lampong black pepper dropped ¼c. to 25¾c. Sarawak black, however, stayed the same at a spot price of 25½c. per pound. Muntok white pepper eased ½c. to a listing of 39c.

Poppy Seed—This material continued to be one of the strong spots on the seeds and spices market last week, sources said. Prices remained unchanged with Dutch material quoted at 25½c. while Polish poppy seed held a listing of 26c. per pound.

Chemical Export Drop

—Continued from page 7

level of $1,344.9 million, but were 28 percent less than the all-time record high of $2,150.8 million in March, 1957.

During the first quarter of the year, total exports, including military shipments, were valued at $4,412.6 million or at a level of 19 percent below the $5,441.7 million reported during the record-breaking first quarter of 1957.

Excluding military shipments, exports for the period January-March, 1958, totaled $4,089.9 million, about 20 percent less than the $5,093.8 million reported for the same three months of 1957.

During March gains were noted in the exports of all but one of the eleven major commodity groups over the levels of February. The one exception was the edible animals and animal products group where a slight decline from $22.2 million to $21.1 million occurred.

The largest dollar value increase among the commodity groups occurred in machinery and vehicles which rose from $514.1 million to $595.3 million. Exports of metals and manufactures rose from $116.4 million to $135 million.

Exports of textile fibers and manufactures rose from $119.3 million to $133.5 million due partly to an increase in exports of unmanufactured cotton.

Increases in exports of bituminous coal and crude petroleum largely accounted for a gain in exports of nonmetallic minerals from $99.3 million to $112.4 million. Exports of inedible vegetable products, except fibers and wood, rose from $65.1 million to $78 million, owing chiefly to increases in exports of tobacco and synthetic rubber.

The bulk of the increase in exports of vegetable food products and beverages from $140.7 million to $153.5 million was due to advances in exports of wheat, soybean oil, and milled rice. Exports of the miscellaneous group of commodities advanced from $100.4 to $139.8 million.

In addition to the increase in chemical exports, increases also were noted in exports of wood and paper from $34.9 million to $40.5 million, and in exports of inedible animals and animal products from $25.6 million to $27.1 million.

CAB Adopting PHS Rules In Moving Etiological Agents

Regulations drawn up last year by the Public Health Service for the packaging and marking of etiologic agents are being adopted by the Civil Aeronautics Board to cover their handling by air.

The agency announced last week that the PHS rules will be followed in all cases by air carriers until the Interstate Commerce Commission issues its regulations covering their transportation by rail. The ICC regulations will then be made to apply to air carriers.

Meantime, interested parties may submit written views or arguments on the proposed rules to the Bureau of Safety of the CAB. The statements must be filed by June 16 and copies will be available after June 18 for examination by interested persons.

CAB noted that the PHS regulations contain no provision for the "labeling" of etiologic agents since such a label has not yet been developed for uniform application. Until such a label is developed, CAB will consider that the requirements for the shipper to mark the name of the article on each package and to certify each such package as acceptable for air transportation will provide an acceptable level of safety.

V. & E. Kohnstamm Moves

V. & E. Kohnstamm, Inc., has moved its sales offices and research department to 401 Broadway, New York 13, N. Y. The new quarters, according to the company, offer room for broader research activities and provide more manufacturing space.

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Coatings Materials

Lead metal declined ½ cent per pound last Wednesday causing a similar reduction in lead pigments. Carlot listings of red oxide were marked down by all major producers to 13¾ cents per pound for 95 percent material, 13.95 cents for 97 percent, and 14.10 cents for 98 percent. Litharge became 13¼ cents per pound, and orange mineral, 16.10 cents. The decline in lead followed a pattern that has prevailed in the market for about two years: heavy supply and price weakness in the foreign market leading to increased exports to this country, thereby prompting local producers to meet the competitive price.

This latest decline is a timely reminder of the troubles that have been hounding domestic producers of nonferrous metals, and the need for some kind of price protection. But Vice-President Nixon's experiences in South America just as effectively revealed the other side of the coin. The administration has offered a Brannan-type subsidy program which is intended to be a compromise. But according to informed observers, this type of plan would ultimately have the same effect on imports as would a tariff or quota system.

In other areas of the coatings market, prices held unchanged last week. A strong tone continued to feature the source market for shellac, but there were still no changes on the local scene. Local dealers regard Calcutta's strength as merely a reaction to the recent round of reductions. Shellac sales here are not particularly brisk, but the pace is much better than a month ago. With demand limited to prompt shipment and nearby, dealers are keeping large stocks of popular grades on hand.

In some segments of the plasticizer trade, sales are showing substantial improvement. A producer of phthalates and adipates has reported increased call for all plasticizers used in production of vinyls. He noted that suppliers to the automobile industry are the only vinyl makers who failed to contribute to the upsurge in demand. Sebacate volume varies between slow and fair. Three weeks ago prices of the group were adjusted downwards to reflect a cut in the quotation of sebacic acid. Tankcar listings were marked down as follows: dibutyl, down 2½ cents per pound to 65½ cents; dibenzyl, down 1 cent to 91 cents; dihexyl, down 1 cent to 64 cents, dimethyl, down 2 cents to $1.28; and dioctyl, down ¾ cent to 59¼ cents per pound.

The March statistics on coatings shipments and output, reported here last week, indicated to one observer that the paint trade was encountering the recession only in the area of industrial sales. He noted that trade sales showed a healthy seasonal improvement of nearly $11 million over the month of February, while industrial sales gained by only $2.8 million.

Word has been received from the gum market that Manila copals are firmer at the source and may soon rise in price locally. At press time no changes had been reported yet.

Price Trends

Advanced

None

Reduced

Lead, red, ½c. per lb.
Litharge, ½c. per lb.
Mineral orange, ½c. per lb..

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
101.46	101.47	101.48	100.79

For Current Prices See Page 9

Prime Pigments

Aluminum Paste, Powder—Producers last week reported an improvement in business volume. As with other materials, it appeared that buyers were moving to rebuild inventories that they had worked from through most of the season. Trade sources are cautiously taking this as a sign that the general economy is beginning to recover from the recession.

Price quotations of aluminum paste and powder are holding to a steady trend. Paste in drums is quoted at 68½c. per pound for extra-fine and 46c. for standard. Powder sells at $1.09; for extra-fine and 79½c. for standard.

Antimony Oxide—The volume of sales to coating outlets has declined over the past few years but this has been partially offset by gains in other outlets. The current market is showing the effects of the long term decline as well as the dampening effect of the business recession.

Prices are described as steady at 24½c. per pound in carlots, and 26c. in smaller quantities.

Carbon Black—The following figures in thousands of pounds, indicate production, shipments, stocks and exports of carbon black for March, 1958, with figures for February, 1958, and March, 1957, reported for comparison:

	Furnace	Contact	Total
Production			
March, 1958	110,027	27,328	137,355
February, 1958	99,977	25,712	125,689
March, 1957	130,110	30,726	160,836
Shipments			
March, 1958	102,812	23,617	126,429
February, 1958	100,031	23,272	123,303
March, 1957	164,832	42,196	207,028
Stocks			
March, 1958	268,180	89,927	358,107
February, 1958	260,965	86,216	347,181
March, 1957	216,741	57,142	273,883
Exports			
March, 1958	*	*	*
February, 1958	22,719	10,933	33,652
March, 1957	25,095	14,150	39,245

* Not available.

The Bureau of Mines last week issued a report on the market for carbon black in 1957. Production was tabbed at 1.8 billion pounds, a decline of 2 percent from the record high chalked up in 1956. Although sales showed a 4 percent increase over the prior year, production was still in excess of shipments, so that producers' stocks increased by 1.8 million pounds during the year. At the end of 1957 operating capacity was 375,580 pounds per day higher than at the end of the previous year, the Bureau noted.

Sales to the rubber industry were 2 percent higher in 1957 because total consumption of rubber rose by that amount. The total value of carbon black production at plants in 1957 amounted to $128 million, making an average value of 7.12c. per pound, which was .59c. higher than in 1956.

Lead Pigments—This group was marked down ½c. per pound last Wednesday with the news that lead metal had declined by that amount. Carlot listings of lead oxide were reduced by all major producers to 13¾c. per pound for 95 percent material, 13.95c. for 97 percent, and 14.10c. for 98 percent. Litharge became 13¼c. per pound, and orange mineral, 16.10c.

With the Summer lull just around the corner, paint makers are likely to be taking just small quantities of material for immediate requirements during the remaining months, a trade source pointed out last week. Producers are now setting their sights on the Fall season when, it is hoped, accumulated demand from the public will revitalize the market.

The question of tariff protection continues to be a major topic among trade sources. It seems that the administration, while sincerely desiring to assist domestic producers, finds its hands tied by the exigencies of foreign policy. Its proposal of a Brannan type support plan has aroused a good deal of criticism on the grounds that if the plan worked at all it would just as effectively stifle imports as would a direct tariff or a quota system. In addition, it would be difficult to administer and expensive.

Zinc Pigments—The sales pace is still unseasonably slow. As noted previously, the rubber industry finds itself stymied by deep cutbacks in automobile production, and only the most optimistic of observers holds out any hope in this quarter for the current season.

Will the automobile industry recover with the introduction of new models next fall? This question is perplexing everyone, laymen as well as trade people. If a confident prediction is hard to come by, the reason may lie in the fact that no one is sure whether the public is really dissatisfied with the size and styling of today's automobile. A lot of people wonder

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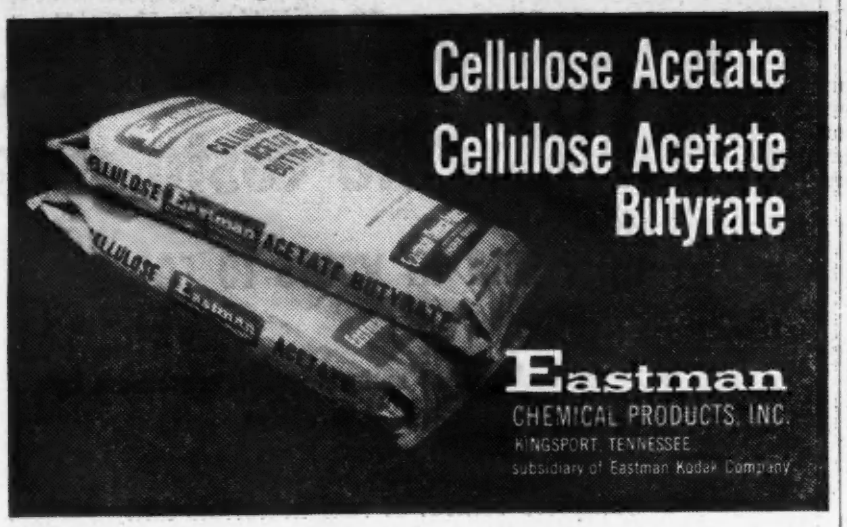

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Coatings Materials

whether Detroit's troubles do not stem more from the size of the price tag than the size of the automobile.

Lacquer Materials

One producer last week encountered a substantial increase in demand for plasticizers used in production of vinyls. He noted that all vinyl outlets were involved in the upsurge except for the segment supplying seat covers and other materials for the automobile industry.

Diethyl Phthalate—Business volume is reported as varying between slow and moderate. Quotations are reported unchanged at the advanced levels posted with the first of the year. That advance was prompted by higher costs of raw material. Supply is amply available to meet consuming requirements.

Dimethyl Phthalate—This plasticizer is encountering fair buying interest at 29½c. per pound in tankcars, 32c. per pound in carlots, and 33c. in smaller shipments. Current output of material is in good balance with the demand level, producers reported last week.

Dioctyl Phthalate—Demand is holding up well enough, but observers note the prevalence of sharp competition for available markets and a narrowing of profit margins in some quarters. Despite increased costs of production, official listings of DOP have held unchanged for better than a year. Because of the general economic climate, observers feel that an upward movement at this time is not likely.

Sebacates—Three weeks ago prices were adjusted downwards to reflect a cut in the quotation of sebacic acid. Tankcar listings were marked down as follows: dibenzyl sebacate, down 1c. per pound to 91c.; dibutyl, down 2½c. per pound to 65½c.; dihexyl, down 1c. to 64c.; dimethyl, down 2c. to $1.28; and dioctyl, down ¾c. to 59¼c. per pound.

Miscellaneous

Casein—French sellers were meeting the price of Argentine casein last week at 19c. to 19¼c. per pound, June delivery, minimum carlot. But because of the lateness of the Flush season in France, transactions had to be made conditional upon supply. With deliveries running about two months behind normal, there is no way of knowing what level supplies will reach. The political crisis in France is, of course, another factor contributing to market uncertainty.

In Argentina the situation is unchanged from last week. Informed estimates indicate a relatively heavy supply there, but sellers evince no particular eagerness to move material. Locally, American consuming mills are still holding out on the possibility that lower prices will evolve when all flush season material is on the market.

New Zealand casein is moving in normal volume at 25c. per pound. American material is steady at long standing quotations of 56c. per pound for 30 mesh and 64c. for 80 mesh.

Natural Resins

Copal Gum—Manila resins were firmer at the source last week, and comparable advances in local listings were strongly hinted. One dealer said that as soon as source prices settled he would make whatever adjustments, if any, were indicated.

Inquiry in the local market continued relatively active. A moderate volume of transactions were made for prompt shipment and nearby.

Dammar Gum—A fair amount of buying took place at unchanged quotations. Activity was almost entirely confined to orders for immediate requirements. Because of the emphasis on prompt shipment dealers continued to keep all popular grades of gum in heavy supply to meet day to day fluctuations in demand.

Fair inquiry was reported for Singapore grades which listed at 40c. to 41c. per pound for No. 1, 31¼c. to 34c. for No. 2 and 17c. to 19c. for No. 3 dust. Siam material moved at 34c. to 35c. per pound.

Shellac—A strong tone at Calcutta continued to feature the shellac market. Local prices, however, were left unchanged. In the opinion of one dealer here, source firmness in this case was merely a reaction to the price decline posted a while back. He expected the market soon to settle.

Although business on the local scene is not particularly brisk, it is far above the level of last month, dealers report. Stocks of bleached and orange grades are abundantly available.

Naval Stores

Pine Gum—For the week ended May 3, the average price per standard barrel of commercial crude pine gum was reported at $24.10, as compared with $24.12 the previous week and $25.36 a year ago. The volume of gum deliveries to plants amounted to 11,700 barrels, as against 8,583 the previous week and 14,842 a year ago. Content per barrel averaged 10.11 gallons of turpentine and 296.9 pounds of rosin. Gum grading percentages ranged as follows: WW, 3; WG, 14; N, 36; M, 31 and K and below, 16.

Rosin, Gum
(USDA, per 100 lbs.)

	Fri. May 9	Mon. May 12	Tues. May 13	Wed. May 14	Thurs. May 15
Drums—					
K	...	$7.75[1]			...
M	...	...	$7.76	$7.78	...
N	...	...	7.98	7.80	...
WG	$8.23	8.15		8.15§	$8.26
WW	8.40	8.55§	8.48	8.40	8.38§
Bags—					
WW	...	...	8.75§	8.25	...

Tankcars (for week ended May 16)—
M or better, $7.54§; K or better, $7.50

Sales, USDA
160* 513* 571* 1,182 316*

New York
(per 100 lbs., c.l., Friday)
WW, $9.60; WG, $9.70; N, $9.20; K, $9.05

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	.514	.5125	.509§	.51	.512
Sales	20,000¶	10,000¶	22,000¶	4,000¶	12,000¶

New York, Friday, per gal., 7 lbs., tankcars, 63c.§ l.c.l., 82c.

* Drums equivalent. ¶ Gallons. § Average price. [1] K or better.

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Olin High-Energy Fuels Plant Seen Weapon

—Continued from page 5

while the green-tinged HEF flame continued to burn steadily.

The example was used to show that the new chemical fuel, because of its greater heat and other properties, continues to burn at higher altitudes than present jet fuel—thereby improving the combustion performance.

The new navy plant will mix boron, hydrogen and other chemicals to produce HEF-2.

Solid Fuel and Solid Propellant

At a press conference following the ceremonies Dr. Herndon explained that a solid fuel becomes a solid propellant when it is mixed with an oxidizer. He pointed out that high-energy solid fuels are now under development in this area.

Dr. Herndon reported that the solid high-energy fuel has greater specific impulse than solids currently used. He described specific impulse as the thrust of a pound of fuel multiplied by the number of seconds it takes to burn. "It takes only a change in the chemical structure to change the liquid into a solid," he added.

Production at the navy plant will more than triple current output. Olin Mathieson has been making the fuel on a semi-commercial basis at the company-owned plant in Niagara Falls since mid-1957.

The new fuel, because of its greater heating and burning values, can increase the range, speed or the payload of aircraft and missiles. Air-breathing engines using present high-energy fuel could increase their range considerably, it was pointed out.

Called HEF-2,3,4

These new fuels have been designated HEF-2, 3 and 4. HEF-3 will be made in the air force plant now under construction, and HEF-4 is now being made on a pilot plant basis. The numbers designate certain changes in the fuel for testing purposes.

Dr. Herndon also reported that laboratory quantities of fuels beyond HEF-4 are now being made by the company. He said they can further increase the range of air-breathing engines, using the best present day jet fuel as a comparison.

The result of five years of research and two years of production testing, the fuel has been manufactured in small laboratory pilot units by Olin Mathieson since 1952. Olin's belief in the future of the new fuels was expressed when the company built its own pilot manufacturing plant at an investment of $5.5 million.

Dr. Herndon said the new plant would employ about 200 persons. The price of the fuel still is in the classified category, he said, "but recent development has brought down the price sharply." He predicted that large scale production prices would be "moderate and within a range that permitted extensive use of the fuel."

High-energy fuels are regarded as fuels with heating values much above those of petroleum-based fuels. Aviation gasoline has a heating range of about 18,500 btu's per pound, while high-energy fuels give considerably more btu's per pound. A scientific rule of thumb is that the more heat expended the more range obtainable from a pound of fuel.

The Olin Mathieson chemical fuel is the result of research undertaken by 1,000 scientific personnel: 500 scientists, 200 clerical staffers and 300 semi-technical craftsmen. Twenty-two colleges and universities participated in the project at one time or another and approximately twenty industrial subcontractors were employed.

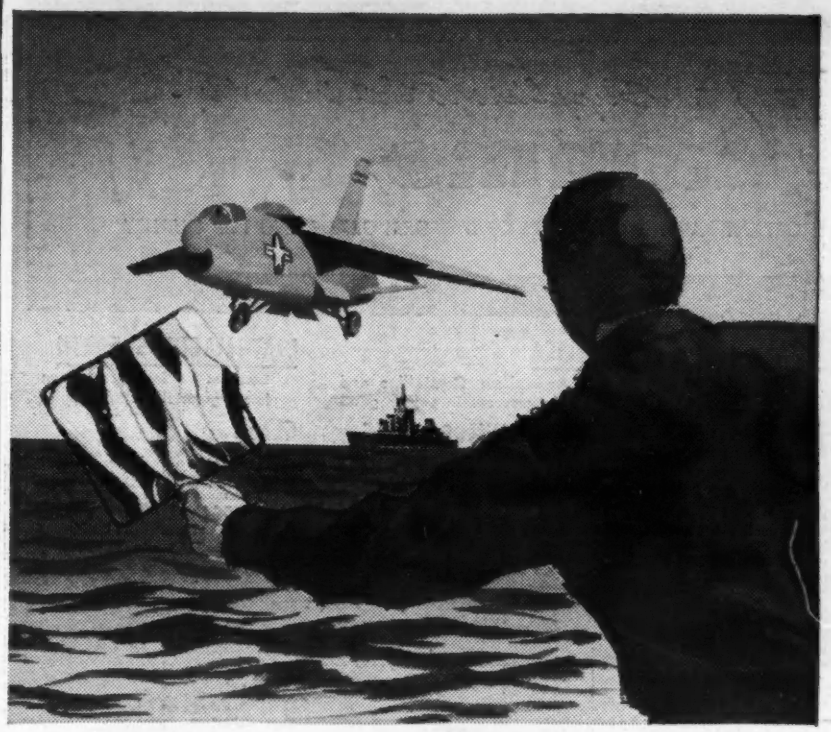
Other Companies to Produce

The fuel developed by Olin Mathieson will be produced by other companies, Dr. Herndon said. These companies will be selected for their experience in handling similar chemicals. This will give an assured supply from several sources.

Dr. Herndon emphasized that the new fuel is completely safe to handle.

"The problem," he explained, "was to combine boron, hydrogen and other chemical elements in proportions to give the optimum combination of btu's per pound, safe handling characteristics and economy of manufacture.

"The breakthrough was made within the incredible period of two years here at Niagara Falls, and the first synthesized sample of HEF was submitted as a candidate fuel. Its superior qualities were obvious, but there were many who said it could not be produced on a large scale," he concluded.



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	Gravity, Specific 60/60°F	.7567
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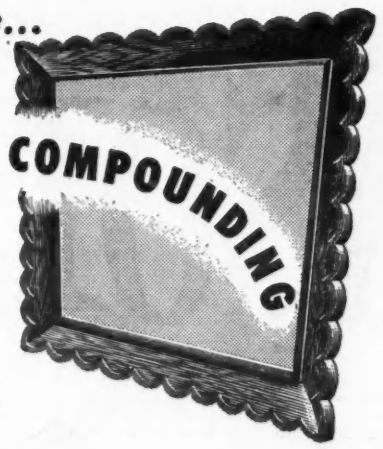

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Trigg Foundation Bequest Of $17,000 in Trigg Will

A bequest for approximately $17,000 was made to the Ernest T. Trigg Foundation under the will of Mr. Trigg who died last August. The foundation has as its primary purpose the establishment of technical scholarships in the chemistry of the paint industry.

The Foundation has also received an additional gift of $1,000 from Morris Treinman of Coloramics Coatings, Inc., Los Angeles. In addition, it has received payment of two $5,000 bequests previously announced. One was made by William Gerke, late president of Sargent-Gerke Co., Indianapolis, Ind., and the other by John Ewell, a friend of Mr. Trigg.

The Trigg Foundation is planning to increase the number of annual scholarships to six in the coming academic year from the four previously granted.

Hazel Bishop Is Bought By C.&C. Television Corp.

Hazel Bishop, Inc., New York, has been bought from its president, Raymond Spector, by C. & C. Television Corporation, also of New York.

The transaction will involve more than 60 percent of the common stock of Hazel Bishop at a price of about $4.50 per share. Mr. Spector will remain as chief executive of the company under a five-year contract.

DuPont Wants to Keep

—Continued from page 3

ernment proposal, widespread selling of the shares, because of the taxes, might bring "disastrous economic consequences."

The Wilmington organization also suggested that under its plan there would be no common directors on the boards of both companies without court approval.

DuPont's proposal followed a ruling by the Internal Revenue Service on the tax aspects of the stock divestiture. The revenue authorities had decided a few days earlier that each share distributed to stockholders by duPont would be subject to tax as ordinary income.

Letter From Greenewalt

Crawford H. Greenewalt, president of duPont, in a letter to stockholders, said that if the Justice department's plan were to be adopted, about two-thirds of duPont's 63 million shares of General Motors stock would be distributed to duPont stockholders over a ten-year period, and one-third would be sold for certain stockholders who would receive the cash proceeds in lieu of stock.

"Since the Internal Revenue Service has ruled that the shares distributed would be taxable to recipients as ordinary income," Mr. Greenewalt said, "selling of duPont and General Motors shares would result on an alarming scale. Some stockholders would sell duPont shares to escape the tax impact of the distribution; others would sell General Motors shares to raise funds to pay taxes on the shares received.

'Would Depress Market'

"This combination of sales, running into millions of shares each year for a decade, would depress the market values of duPont and General Motors common stocks, and could depress the stock market in general. Loss in value to duPont and General Motors stockholders, through taxes and depressed prices, could reach several billion dollars.

"The company will oppose such a drastic and punitive proposal with every means at its command. The government plan would not only do violence to the public interest by prompting severe and possibly widespread economic dislocations, but would outrage every tenet of justice by imposing penalties upon hundreds of thousands of shareholders who were in no wise responsible for what, through a new interpretation of the law forty years after the fact, was found to be a violation of the Clayton Act."

Seen Protecting Public Interest

On the other hand, Mr. Greenewalt said, the company's proposal "would protect the public interest by avoiding the disastrous economic consequences of the government plan, yet would carry out the mandate of the supreme court by depriving duPont of all the rights and attributes of a stockholder which could possibly be used to influence General Motors to deal with duPont."

Mr. Greenewalt pointed out that the duPont proposal "does not involve compulsory distribution and therefore would not impose the confiscatory tax penalties or cause the severe reduction in the market values of duPont and General Motors stocks that would follow from the government plan."

"Unless legislation is enacted to eliminate the tax penalty on stockholders (as has been enacted in the case of certain major forced distributions such as those required to be made under the Public Utility Holding Company Act and the Bank Holding Company Act) no distribution of duPont's General Motors stock could be made without drastic consequences to the stockholders of both companies," he concluded.

DuPont's proposal provides that the company's General Motors stock would be voted by its more than 185,000 stockholders. Christiana Securities Company and Delaware Realty & Investment Company, which own in the aggregate 29 percent of the duPont common stock outstanding, also would pass the right to vote their pro rata shares to their more than 4,000 shareholders.

DuPont Stock Owners

—Continued from page 3

no sense at all when imposed upon innocent parties without any real need in terms of the objectives of the case."

The two companies gave their approval to the proposal duPont filed (See duPont article above.) as an alternative to the government plan. DuPont proposed that its 63 million shares of General Motors stock would be voted by duPont's 185,000 stockholders, except that the shares allocable to Christiana and Delaware Realty would be voted by the 4,000 stockholders of those companies rather than by the companies themselves.

Why Companies Like Plan

"The duPont proposal," the companies told the court, "would fully satisfy the objectives of the supreme court decision, and would do so without the confiscatory and unjustifiable results for the parties, innocent stockholders and the national economy which are imposed by the government's proposed judgment."

Christiana Securities is a publicly-owned investment company, organized in 1915 to purchase a substantial block of duPont stock which T. Coleman duPont wished to sell. Since its inception, Christiana has owned approximately 27 percent of the outstanding common shares of duPont company.

Delaware Realty was organized in its present form in 1924 to receive substantial holdings of Christiana and duPont and other securities from Pierre S. duPont, in exchange for a life annuity for him and his wife.

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Oils, Fats and Waxes

Consumer interest in oils and fats continued restricted to nearby requirements last week. Trading was spotty and lacked volume. Edible oils were steadier and slightly higher. Cottonseed, corn and soybean oils advanced fractionally. Tight supply of peanut oil resulted in buyers raising bids ¼ cent per pound, without attracting sellers interest. Lard was strong and fractionally higher. Lack of buying interest in crude coconut oil caused the market to weaken and prompt and later shipments declined fractionally. Copra was scarce and nominal.

Tallow and greases remained steady following trading for soapers account at a fractional advance. Demand, however, subsided at the higher levels, but sellers maintained offers at the advance. Export business was slow last week. Lard was stronger and advanced fractionally.

Brazilian castor oil continued firm and moderate sales were booked at higher levels for prompt delivery. Castor beans were lower for shipment from Haiti and Peru, while offers from Brazil were quotably unchanged. Light stocks of tung oil for nearby delivery were closely held at the recent price advance. Forward positions also were well held. Linseed oil was reduced slightly reflecting lower flaxseed market. Oiticica oil was unchanged and steady. Buying interest in new crop menhaden oil continued slow for domestic and export account.

Trend of soybean meal continued downward, prices declining $1.50 per ton, for nearby delivery, while June forward was unchanged. Linseed meal was quotably unchanged.

Price Trends

Advanced

Castor oil, No. 1, Braz., ¼c. per lb.
Cocoa butter, 3½c. per lb.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Greases, ¼c. to ¼c. per lb.
Lard, cash, ¼c. per lb.
Peanut oil, crude, ½c. per lb.
Refd., ⅝c. per lb.
Soybean oil, crude, ¼c. per lb.
Refd., ½c. per lb.
Tallow, ¼c. per lb.

Reduced

Coconut oil, crude, ½c. per lb.
Linseed oil, 2/10c. per lb.
Linseed oil acid, 2/10c. per lb.
Soybean meal, $1.50 per ton.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	May 17, 1957
116.61	117.07	117.83	117.00

For Current Prices See Page 9

Vegetable Oils

Castor—Brazilian oil was firm with trading at 16c. per pound, tankcars, New York, prompt delivery. Domestic oil was in fair request for immediate needs. Prices were without change. Trading in castor beans were reported at $90 per ton, f.o.b. Haiti and Peru. Offers from Brazil were nominal around $110 per ton, f.o.b. with buyers ideas much lower.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	.....
Previous week	.....	1,602,000
Corresponding week, 1957	.....	1,688,000
Total this year	8,769,700	33,375,750
Corresponding period, 1957	10,763,200	42,404,000

Coconut—Quiet business unsettled market. Crude was reduced to 14¼c. per pound, tankcars, f.o.b. Pacific coast, May and 14c. for June. Tankcars were lower at 15½c., New York, prompt delivery.

Corn—This market was firmer and higher. Crude was moved at 14c. per pound, tankcars, f.o.b. mills. Refined was firmer at 17.73c., tankcars, New York basis.

Cottonseed—Trading in futures was light on the New York Produce Exchange last week. Market ruled steady, scoring fractional gains in May and was practically unchanged for later positions. Speculative elements was both sides of the market, while trade interests continued to absorb May offers and tenders. May tenders increased 54 contracts to 149, which were readily stopped. May option expired Thursday with sales at 15.75c. Consuming demand for cash oil continued affected by the lower cost of soybean oil. Refined cottonseed oil was firmer with crude salad oil was lifted to 17½c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was scarce and higher. Light sales took place at 13¾c., tankcars, Valley. Tankcars were nominal at 14c., southeast; 13⅛c., Lubbock and 13¼c., Waco.

Export declarations for the week ended May 9 follow: Crude, 1,211,070 pounds and refined, 2,568,650 pounds.

Household purchases of margarine in March, 1958, totaled 113 million pounds, up 20 percent from March 1956*, it was reported by the Department of Agriculture. No margarine datum was collected for March 1957.

Linseed—Consuming demand continued restricted to fill-in needs. Market was easier with lower flaxseed. Prices were cut fractionally. Raw oil was quoted at 13.7c., tankcars, Minneapolis, May-August and 13.3c., September-November.

Stocks of flaxseed and linseed oil as of January 1 in Canada, Argentine, and the United States, were at the equivalent of 70 million bushels of flaxseed, or about 20 million bushels less than a year earlier, according to the Foreign Agricultural Service.

Argentine carryover stocks of oil were heavy; in the current calendar year are up possibly 4 to 5 million bushels from last year, it was stated. In contrast, supplies in Canada and the United States on January 1, were around 25 million bushels less than a year earlier, mainly because of sharply reduced output.

Although farmers' planting intentions as of March 1 in both the United States and Canada indicate smaller acreages in flaxseed this year, it was stated, with average yields production could increase in both countries, as yields in 1957 were far below average. Larger crops in the United States and Canada could mean additional supplies for domestic consumption and export next fall.

Domestic disappearance of linseed oil has averaged around 530 million pounds (equivalent to about 27 million bushels of seed) in the past five years. Linseed oil continues to be the major drying oil, although its importance has been declining in recent years. The percent of linseed oil used in drying oil products has declined from the high of 71 percent in 1946 to 43 percent in 1957.

Flaxseed—Crushings in April totaled 1,553,422 bushels, bringing the total for August-April to 19,199,045 bushels, it was reported by the National Flaxseed Processors Association.

Minneapolis.—Crushers reduced bids in the cash flaxseed market 3c. a bushel to $2.95, spot and to-arrive, basis Minneapolis. Slight spurt in to-arrive bookings occurred ahead of the decline. C.C.C. offerings of off-grade flaxseed declined sharply. Government received no bids on its tender of 300,000 bushels of seed for unrestricted use, not surprising in view of the fact that minimum acceptable price was $3.28, f.o.b. It is anticipated that government will retain supplies until new disposal program goes into effect July 1, providing for competitive bidding. South Dakota flaxseed is about 50 percent seeded, North Dakota about 20 percent and Minnesota about a third. Fourteen cars were reported sold in the spot market, to arrive bookings at 3 cars and 4,550 bushels. Arrivals for all accounts amounted to 165 cars (122 to C.C.C.), compared with 625 cars a year ago. Shipped were 24 cars, against 36 last year.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, May 16, follow:

	Sales	Cents per Pound High	Low	Close
May	154	15.85	15.58	Expired
July	169	15.84	15.68	15.74S
Sept.	142	15.73	15.61	15.65S
Oct	37	15.60	15.53	15.52@15.54
Dec.	24	15.55	15.46	15.46@15.49
March	35	15.62	15.51	15.51@15.55
May (1959)	25	15.61	15.53	15.45@15.54

Total sales and switches, 586 contracts.

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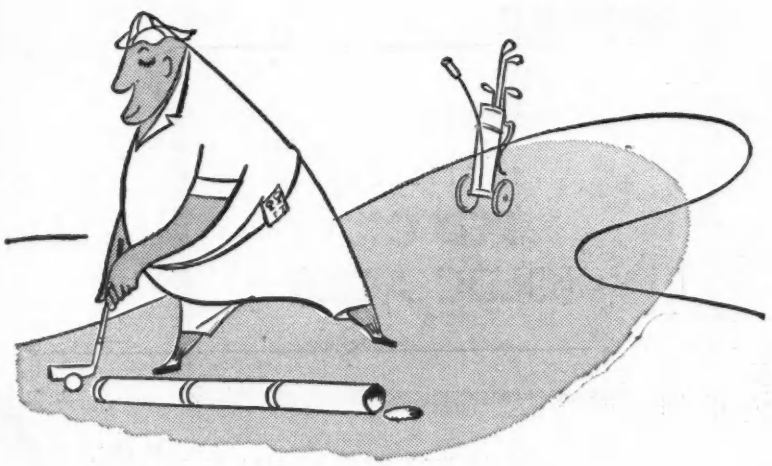

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Oils, Fats and Waxes

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1957-58	1956-57	1957-58
Past week	288,750	1,125,000	42,000
Since Sept. 1..	14,804,500	18,709,000	1,780,750

Oiticica—Trading was spotty, chiefly for prompt needs. Tankcars were offered at 16½c. per pound, New York, prompt. Drums were unchanged at 18c. to 18½c. per pound, according to quantity.

Olive—Interest in replacements from primary sources continued inactive. Spanish oil was offered at $59 to $60 per 100 kilos, drums, f.o.b. ports, depending upon quality. Greek oil ranged from $60.50 to $61.50 per 100 kilos, drums, c. and f., New York, prompt shipment and Tunisian at $58, same basis. Oil on spot was quiet. Greek oil ranged from $2.45 to $2.50 per gallon, drums, duty paid, as to quantity.

Palm—Business was spotty. Drums were unchanged from 14½c. to 15½c. per pound, spot as to quantity and 12¼c. for tankcars.

Peanut—Limited stocks kept this market strong. Crude of prime quality was scarce and 17¾c. bid and 18c. asked per pound, tankcars, f.o.b. mills. Refined was unchanged at 21¼c., tankcars, New York basis.

Rapeseed — Market remained steady. Light trading took place at 16c. per pound, tankcars, New York, nearby delivery. Drums were maintained at 17½c. to 18c., spot as to quantity.

Soybean—While trading was reported light and spotty, the market remain on a steady basis last week. Sales of crude ranged from 11c. to 11.04c., tankcars, Decatur, May delivery. At the close, tankcars were held at 11⅛c., against bids of 11c. Refined salad was higher at 13⅞c., tankcars, New York, prompt delivery.

Export declarations for the week ended May 9 follow: Crude, 1,242,920 pounds and refined, 1,389,380 pounds.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, May 16, follow:

	Sales	High	Low	Close
		Cents per Pound		
July	1	11.10	11.10	11.07@11.10
Sept.	1	11.00	11.00	11.06@11.10

Total sales, 2 contracts.

Tung—Tight stocks for nearby delivery were closely held at 22c. per pound, tankcars New York. June forward was quoted at 21½c., same basis. Drums were firm at 23½c. to 24c., spot, depending upon quantity.

Miscellaneous

Cocoa Butter — Market was sharply higher and advanced from 99c. to $1.04 per pound, spot, according to quantity.

Copra—Offers for shipment were nominal at $189 per ton, c.i.f. Pacific coast. Buying interest was quiet.

Philippine copra production in 1958 is expected to be about 15 percent below the record 1.3 million long-tons of 1957 because of extensive drought damage, according to Foreign Agricultural Service. Production of copra for the first quarter of 1958 is estimated at 254,000 tons, one-fifth below a year earlier and the second quarter is expected to be down at least as much, and probably more. Thus, the firm market conditions of recent months are expected to continue during the first half of 1958 because of reduced production, effects of the temporary suspension of the 3-cents-per-pound processing tax on coconut oil in the United States, barter contracts in copra, and political disturbances in Indonesia.

The Foreign Agricultural Service also reported that the Indonesian military authorities have banned the export of copra and coconut oil from East Java Province. Special persons are required to take out of the province more than 20 kg. (44 pounds) of coconut oil.

Fats and Greases

Greases—This market was firmer and fractionally higher. Trading was spotty. Yellow grease was sold at 7½c. per pound, tankcars, delivered and choice white ranged from 8¾c. to 8⅞c., same basis.

Lard—Firmer tone developed under improved trading. Prices advanced sharply. Cash lard was lifted to 12.60c. per pound, drums, Chicago. Exports declarations total 1,893,810 pounds for the week ended May 9.

Tallow—Improved trading strengthened this market and quotations advanced from ⅛c. to ¼c. as to grade. Soapers bought bleachable fancy at 8¼c. per pound, tankcars, delivered and withdrew from the market. Offerings were light and market remained steady. Prime was quoted at 8c.; special, 7¾c., and No. 1, 7½c., same basis. Export demand was slow. Guaranteed fancy was quoted at 9½c., drums, f.a.s. and 8¾c., bulk.

Fish Oils

Cod—Buying interest was reported light and spotty. Shipments were unchanged at 9c. per pound, drums, exdock, New York, prompt. Demand for spot was quiet. Drums ranged from 10¼c. to 10⅜c., as to quantity.

Menhaden—Trading was slow for domestic and export delivery. Old crop was nominal at 8c., tankcars, f.o.b. works, and new crop also nominal at 7½c., same basis, if and when made. Refined grades were in light demand for fill-in needs. Light pressed was offered at 11½c., tankcars, New York and shadable.

Fatty Acids

Lower prices for animal fatty acids became effective last week due to keen competition. Tallow acid was reduced 2¾c. to 11c., tankcars; oleic acid, single distilled, 1c. to 14c., tankcars and double, 15¼c.; stearic acid, single pressed, 2c. to 15½c., carlots; double pressed, 16c., and triple, 18¼c. Trading for all grades continued spotty. Vegetable acids also were in moderate demand but were maintained at former prices.

Cake and Meal

Cottonseed Meal—Trading was confined to small lots. Market was easy. Meal, 41 percent was quoted at $61 per ton, sacked, Memphis; $70, Alabama, Georgia and Carolinas, May-June shipment.

Linseed Meal—Trading fairly active for nearby delivery. Prices without change.

Minneapolis.—Moderately improved demand developed for the limited supplies in this market. Purchases were almost entirely for nearby needs, deferred interest near a standstill. Withdrawals against existing contracts were heavy. Production was slow. Extracted meal, 34 percent protein, was unchanged at $55 a ton, bulk, in carlots, f.o.b., Minneapolis, for May delivery. Old process meal was unchanged at $56.50 for May delivery and $56 for June.

Shipments of linseed meal, in pounds, were as follows:

	1957-58	1956-57
Past week	13,200,000	8,280,000
Since Sept. 1	500,400,000	486,040,000

Soybean Meal—Demand for soybean meal was slower, prices declining $1.50 per ton. While there has been some tapering in formula feed business, in most sections it was still quite brisk. Mixers purchased substantial quantities of May meal in early "scare buying," and are now in a position to order out the more expensive meal while watching for the low point in the market. Users often requested early shipment on existing balances rather than making additional commitments. Soybean meal, 44 percent protein, was at $55 to $55.50 a ton, unrestricted, bulk, Decatur, for May delivery and $53.50 to $54 for June.

Waxes

Trading in vegetable waxes continued restricted to immediate requirements. Carnauba remained unchanged, despite light consumer interest. Stocks on spot were well held due to the strength of replacements from Brazil. Offers for shipment were limited and firm. Yellow grades were strong and unchanged. Fatty grades also were closely held. Demand for refined beeswax was light, but all grades were well held reflecting the scarcity of offers of crude. Other grades were unchanged and moved in small lots.

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Linde Plans Oxygen Unit

—Continued from page 4

confidence in the expanding future of steel, and of the role of oxygen in its steelmaking processes, Linde said.

The use of oxygen in steelmaking has climbed from about thirty cubic feet per ton in 1930 to the present national average of 200 cubic feet of oxygen for every ingot ton produced.

In the not-too-distant future, metallurgical uses are expected to take and hold the lead, because in more and more cases the use of oxygen has become a low-cost alternative to building additional furnace capacity to meet the nation's future demands for steel.

Will Replace Other Capacity

The new plant will replace Linde's oxygen capacity already installed at Homestead, Edgar Thomson and National Works. Last June, at Duquesne, Linde put on-stream a 500 ton-per-day plant. However, this oxygen capacity—equivalent to the entire country's estimated usage twenty years ago is still not enough to handle predicted future requirements at the four works. This future demand will be filled by Linde's new Monongahela valley plant.

All oxygen producing plants must be shut down periodically for thaw-out and maintenance operations, and there are inevitable unscheduled shut-downs which will take a plant out of operation for hours or days. During these shut-downs, Linde will bring in "Driox" liquid oxygen in sufficient quantities to supply U. S. Steel's essential requirements at the four works.

Linde said it is basing its decision to commit new funds for this giant plant on two important factors: first, a familiarity with the role of oxygen in the steel industry gained through fifty years association as its supplier; and, second, a confidence that the savings in oxygen cost attributable to these production facilities will team perfectly with the new oxygen processes now under close study in its research and development laboratories.

TVA Observes

—Continued from page 5

processes and equipment which, he said, are being widely used or can be more widely used by small fertilizer producers:

TVA has been studying the ammoniation and granulation art for some five or six years and has turned out a number of very useful advances. The TVA ammoniator-granulator — essentially a rotating drum— is now used in well over a hundred plants, large and small.

Fifteen equipment manufacturers have built and installed the unit in plants throughout the country. It can be used to make high-analysis granular products with various commonly available materials such as ammonia, nitrogen solutions, solid nitrogen materials, superphosphates, diammonium phosphate, sulfuric or phosphoric acids and potash, he said.

High Degree Possible

A high degree of ammoniation can be reached in the equipment to make best use of low-cost nitrogen materials. Requirements and technics have been developed by the TVA investigators for numerous formulations, including 12-12-12, 10-20-20, 5-20-20, 0-20-20, 20-10-10, and others. High-analysis fertilizers such as 17-17-17 and 16-48-0 can be made in the ammoniator with nitrogen solutions, phosphoric acid and potash.

Granular superphosphate can be made in the unit. Both the mixing of rock and acid and the granulation are done in the rotating drum which, in this case, acts as an acidulating and granulating unit rather than an ammoniating and granulating unit. Thus, it is possible to use this single piece of equipment for making either superphosphate or mixed fertilizers, according to Mr. Young.

Mixer in Many Plants

TVA's continuous superphosphate mixer, a simple cone, is being used in many small plants. A few years ago only triple superphosphate was made in the cone, Mr. Young said. Now it is a production unit in many ordinary superphosphate plants. Equipment manufacturers have designed efficient, low-cost plants around the cone mixer, and superphosphate of excellent quality is made in the units.

The TVA engineers have obtained a great deal of information on the production of enriched superphosphate, as well as the ordinary and triple types.

A superphosphate of very high P_2O_5 content—55 percent—is being produced experimentally with rock phosphate and superphosphoric acid, another product of the TVA research, he observed.

A TVA process that may prove to be particularly useful to the industry is one in which superphosphate is produced for immediate ammoniation. By using finer rock and an excess of acid more dilute than is the usual practice, the TVA investigators found that superphosphate, either ordinary or triple, could be produced ready for ammoniation in just one hour. This process makes possible the immediate production of mixed fertilizers and eliminates the need for a large inventory of superphosphate.

Using Concentrated Materials in Mixtures

Considerable study has been given the use of concentrated materials such as diammonium phosphate, urea, calcium metaphosphate, granular potash, and others, in the production of high-analysis fertilizers. Numerous formulations have been made as dry mixtures and as granular products. They have been studied to determine chemical compatibility, segregation characteristics, and storing and drilling qualities.

Some of the grades made in these experiments are 18-18-18, 16-32-16, 11-28-28, and 26-26-0. The data from these tests are of particular interest to dry mixers and bulk blenders.

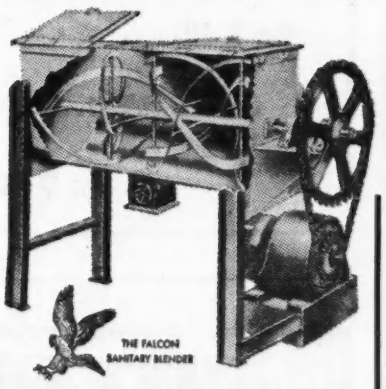
Two big problems in improving liquid fertilizers are to make more concentrated liquids and to use cheaper materials. The newly-developed superphosphoric acid, now being produced experimentally and distributed by TVA for testing, is a big help in making better liquid fertilizers, said Mr. Young.

Over 40 Percent More Concentrated

The acid is over 40 percent more concentrated than the usual commercial phosphoric acid and can be used to make mixed liquid fertilizers containing 40 or 50 percent more plant food. Increasing concentration of liquids saves on storage and handling for producer and farmer.

The super acid also enables the production of stable liquid mixtures with low-cost "green" or wet-process phosphoric acid. Adding a fairly small proportion of super acid to the green acid before ammoniation enables one to make a fairly clear solution that will not deposit a lot of solids in tanks and lines.

Only TVA makes super acid at present, but the process is ready for commercial producers, Mr. Young pointed out.



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Bagley & Sewell Double Drum Dryer; 28" x 60".
Gen. American Twin Drum Dryer; 42" x 120".
Stokes Rotary Jktd. Dryer; 18" x 8' with Agitator, Dust Collector and accessories.
Hersey Rotary Gas Fired Counter Current Dryer; 5' x 26", complete.
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Raymond 2 Stage Flash Drying System; complete.

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Blaw Knox Stainless Resin Kettle or Reactor; 7'6" x 7'6".
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4—**Groen** 150 gal. stainless kettles, Dbl. motion agitators.
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1—Leader Stainless Steel jacketed horizontal ribbon blender, 40 cu. ft.

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3—Robinson Type 316 stainless steel sigma type jacketed Heavy Duty Mixers, 400 gallon capacity, 60 HP.

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1—Nickel 1000 gallon jacketed kettle.

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1—Pfaudler 200 gal. stainless steel jacketed kettle, 100# working pressure.

1—Baker Perkins Type 316 Stainless Steel Ter-Meer Centrifuge, Model HS-24".

1—Stainless steel jacketed vacuum Reactor, 500 gallon.

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1—Stokes stainless steel rotary vacuum dryer, 3' x 15'.

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For Sale—Completely rebuilt Lehmann #1A 15¾"x39⅜" and Day 14"x30" high speed Roller Mills; Elgin model H, high speed filler, cap dropper, can closer. Irving Barcan Co., 249-51 Orient Ave., Jersey City 5, N. J. DElaware 2-6695.

Stokes T.R and 280, single punch presses; Kux 64 and 65 presses; Mikro S-1 and Bantam pulverizers; 43-B Stokes granulator SS; Simpson #0 Mixer—All excellent condition. H. Pearlman, Talbot 4-2050 (Newark, N.J.).

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Experienced Core Oil Salesman for New Jersey, New York and Connecticut. Excellent opportunity for right man to become partner. Give complete necessary data in strict confidence. Our organization knows of this ad. OPD 547.

Progressive New Jersey chemical manufacturer seeks salesman for selling industrial chemicals in eastern area. Splendid opportunity to advance. Write resume of experience, age and salary desired to ODP 548. Replies confidential.

Chemists, Exceptional Opportunity offered to 2 good men. One to head laboratory and younger man as assistant in A-A-1 company specializing in plastic tank coating linings. Replies strictly confidential. OPD 549.

POSITIONS OFFERED

Sulphur Sales: Immediate opportunity in sales of crude sulphur for established producer. Proven sales ability essential, preferably on sulphur, heavy chemicals, or related fields. Background of production experience in sulphuric acid, pulp and paper, helpful. Location: Progressive southern city. To investigate the position in strictest confidence, please include personal data, experience, education, and salary requirements OPD 550.

Color Chemist: Contemplated improvements in our Organization offer a very good present and future opportunity for a Chemist familiar with development and production of Organic Lakes and Toners. All replies held in strict confidence. Magruder Color Co., Inc., 2385 Richmond Terrace, Staten Island 2. N.Y.

Drier-Paint Additive Chemist Wanted—Outline training and experience. Wonderful opportunity for hard worker to be technical director for growing, aggressive chemical manufacturer. Profit sharing. Address OPD 544.

Purchasing Agent Important in Any Industry

—Continued from page 7

purchasing policies, as well as our pricing policies, are to keep long-term progress in mind, as purchasing agents you should take a long, close look at the reputation and plans of your suppliers in research and development.

"Look particularly at their work in your field of interest. This should provide an index to their capabilities as a long-term source of better products, better technical service, better over-all value. We should put greater stress in our purchasing policies in these areas."

To Advantage of Supplier

The supplier might find this to his advantage, too, Mr. White said. He explained it thus:

"At the same time, the supplier may well find that the active cooperation he offers the purchaser becomes one of his most powerful competitive weapons. When vendor and purchaser work together for greater value, almost inevitably, the profit to both parties is greater.

"We are all proud of the amazing progress the chemical industry has made in a few short years. The benefits to all the American people in jobs, products, better living and greater educational opportunities has been tremendous.

"If industrial management makes future growth an integral part of all its policies, there is every reason to believe there will be a continuance of the same trend that has doubled our real national product every twenty years."

Turning his thoughts to another facet of business administration, Mr. White said that the policies that should be established for purchasing should also be applied for pricing. The policies for both should be compatible, he stated.

No Double Standard Wanted

"Both simple morality and sound business practice demand that we should not operate under one set of rules as sellers and another set of rules as buyers," is the way Mr. White put it.

He added:

"This consideration has particular application to our own chemical industry. The chemical industry, as you know, is its own best customer. Almost without exception, every seller of chemicals is a buyer of chemicals. As a result, the importance of good trade relations is basic if the industry is to expand and progress and make its fullest possible contribution to our society."

Continuing with the philosophy of pricing, Mr. White said:

"Industrial pricing has been assigned three general functions, each representing, in turn, a separate group of complex problems and questions. These traditional price functions are—to market the goods, to recover costs and to provide a reasonable return on investment.

"No one would deny that price should promote the sale of goods on existing markets. But . . . price is merely one link in the marketing chain.

"The proper price expresses more than a strictly monetary value. It must consider the value of the product to the user . . . product design and improvement . . . the availability of the product. From the standpoint of competition, proper price must take into consideration not only the market within the industry itself but the competition from other industries offering alternatives to the prospective purchaser.

Problem Further Complicated

"When we come to the second function of price—recovering production and marketing costs—the problem is further complicated by a number of 'invisible costs,' including depreciation recovery and the steady erosion of our money value. There are the additional problems of recovering the costs of technological innovations and of research and development.

"The third function of pricing—providing a reasonable return on investment—presents its own set of complex factors. What is a reasonable return in one industry may not be in another. Company pricing goals must take into account the present state of development, the degree of need for further capital investment and the like.

"In this connection, the pricing policy should aim at long-term total profits. That is, a relatively continuous reasonable return and a careful re-investing of some of these returns to insure future profits. In this process, it is just as essential to maintain the flow of consumer purchasing power continuously as it is to maintain plant capacity or other generalized capital reserves. Management must, therefore, try to anticipate changing conditions and demands and make proper adjustments between the costs of goods and the prices of goods, between the prices of labor and the prices of consumers wares.

Still Another Consideration

"All this is involved in business pricing policy. And there is still another highly important consideration that must be included. Today, our forward-moving, closely-inter-related economy makes it imperative that we go beyond these three traditional pricing functions.

"Industrial management must constantly ask itself if its pricing policy also serves the goals of long range progress and growth in the company, the industry and the economy. In other words, pricing policy must become an arm of corporate policy aiming at continued improvements in efficiency. These efficiencies, as attained, should be translated into more earnings for the investor, better wages for the employees and lower prices and better products to the general public; into all of these, not one or two."

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Drug Firms Shocked at Salk Pricing Case

—Continued from page 5

the indictment, handed down by a federal grand jury in Trenton, N. J., last week, charging price fixing and the elimination of competition.

The others from whom comments came were: Merck & Co., Rahway, N. J.; Parke, Davis & Co., Detroit, Mich.; Wyeth Laboratories, Philadelphia, a division of American Home Products Corporation, and Pitman Moore Division of Allied Laboratories, Inc., Indianapolis.

Lilly Heads Defense

Lilly led off the defense. The company took advertising space in 250 newspapers across the country to place its answer before the public. Here are some of the statements, made by Eugene N. Beesley, president:

"We are extremely shocked at this charge of alleged price conspiracy against the producers of polio vaccine. So far as Eli Lilly & Co. is concerned this is complete nonsense. It would be a strange conspiracy, indeed, that had as its purpose constant decreases in prices.

"We have voluntarily reduced the price of our vaccine five different times since we first made it available. As the result of these step by step reductions, the price of Lilly vaccine today is about one-half of what it was at the beginning.

"This series of voluntary price reductions began a long time before the Justice department initiated its investigation, and was a result of our productive achievement—not of legal harassment.

"We have given the government a discount of 52½ percent from our list price on all vaccine paid for by government agencies.

"Lilly's average profit on all the polio vaccine we have sold to date has been only 6¼ cents per dose.

Eli Lilly & Co. produced well over one-half of the vaccine made in the United States to fight the great battle against the crippling disease poliomyelitis. In just two years paralytic polio in this country has been reduced by more than 80 percent.

'Most Difficult Program'

"Production of polio vaccine was by all odds the most difficult biological production program ever undertaken by Eli Lilly & Co. Never in this company's history have a few pennies of profit per dose required such complex manufacturing procedures and such serious risks to the company and its employees.

"The investment and the risks were enormous. The demands of the project were such that other programs of research, development, and production had to be deferred. It was only because of our large-scale experimental work in live tissue culture—launched long before its application to polio vaccine was foreseeable—that Lilly was able to assume leadership in the exacting task of producing and testing this vaccine.

"According to a report published by the Public Health Service there was a total inventory of 26,423,000 doses of vaccine available as of May 2. Of this total, Lilly vaccine amounted to 24,043,000 doses. One of the problems we now face is the potential loss of much of this 24,000,000 doses of vaccine which we have on hand. (If it loses potency before it is used, the vaccine must be destroyed.)

"This tremendous amount was produced in anticipation of its need for vaccinating millions of Americans who had not yet been protected against polio at the start of the year. The demand has not materialized."

Merck Had This to Say

John T. Connor, president of Merck, had this to say:

"There is absolutely no substance to the charge against Merck. The record of our production and pricing of Salk vaccine clearly demonstrates that Merck did not violate the anti-trust laws.

"In late 1953, at the urgent request of the Polio Foundation, we plunged into the risky and difficult problem of manufacturing a safe and effective polio vaccine. It took us two and a half years of intensive and very costly research, development and production effort before we had a marketable product. Our competitors, who entered this field long before we did, had been marketing polio vaccine for thirteen months before we sold our first vial.

"When we produced our first vaccine for sale in May, 1956, we had to decide what price we would charge. We could have charged more than the market price but, at a time of acute national shortage, this would have been considered profiteering. We could not afford to charge less than the market price in view of our heavy costs. We chose the only reasonably alternative. We charged the market price. As soon as we began to move out of the red, which took us another year, we cut the price of our vaccine.

"These pricing decisions were made independently, in conformity with the law and the public interest."

Wyeth's Opinions

Wyeth responded to the news this way in a statement from its president, H. W. Blades:

"Wyeth categorically denies that it has engaged in any price conspiracy or any other unlawful activity connected with the production or sale of polio vaccine, and it is our intention to oppose the Government's action vigorously before the courts.

"The development of large-scale production of a new vaccine entails many technical problems and risks, and large expenditures of money and time. Despite these hazards, the fact is that there have been a number of competitive reductions in the price of polio vaccine.

"For well over a year after the vaccine program started, Wyeth voluntarily abandoned its normal methods of distribution to make the Salk vaccine available to federal and state health departments on a first priority basis, and at reduced prices, for use in their public vaccination programs."

Parke-Davis said this:

"We never have conspired with other manufacturers to fix or control the price or the market for this (polio vaccine) or any other pharmaceutical product."

Pitman-Moore Comments

Kenneth F. Valentine, president of Pitman-Moore, deplored the indictment. He pointed out that he had not seen a copy of it but added:

"It is rather difficult to comment except to say categorically that the company has not been a party to any price fixing agreement, nor has there been any agreement to adopt non-competitive terms or conditions of sale. We know of no information or testimony which was or could have been submitted to the grand jury which would possibly justify the charge.

"This charge is a poor reward for the courage of management and stockholders of a private business in risking the company's capital in order to participate in a government sponsored program to produce an effective preventive for this tragic disease.

"The only cooperation we know of between manufacturers was with respect to testing and perfecting the product at the specific request of an agency of the United States government."

Drug Retailing Continues to Be Major Problem

—Continued from page 7

medicines, but I guess this is too much to hope for."

Dr. Howard A. Prentice, executive vice-president and treasurer of the association, striking to what the proprietary manufacturers consider the heart of the problem, contended that the self-service method of selling proprietary or packaged medicines in independent and chain drugstores is revolutionizing drug retailing.

No Conflict

"Self-selection and self-service of proprietary drugs in drug stores does not conflict with the professional standing of the pharmacist," he argued.

Dr. Prentice spoke of the need for self-service as a remedy for skyrocketing costs. "It is to the druggist's economic interest to zealously retain his right to merchandize proprietary medicines by modern self-selection and self-service methods," he said.

In citing an approach to resolution of the manufacturer's problem, Dr. Prentice said that "it is clearly evident that we must continue to improve our relationships with organized pharmacy as a major activity. Too frequently throughout the country our stand on restrictive sales is interpreted as expressing the opposition of the association towards all levels of pharmacy and its many problems."

Faced With Changing Attitudes

Detailing a number of specific conflicts and setbacks that occurred during the past year, Dr. Prentice explained that "basically, we are faced with changing the attitudes of people and thus we must seek areas of common interest and demontrate our sustained interest in the problems of organized pharmacy, including, among others, a settlement of the restrictive sales controversy."

James F. Hoge, general counsel of the Proprietary Association, broke the issue down into its practical economic levels and told the manufacturers that any proposals to contract the number of distributing outlets for proprietary products are not in the interest of an expanding economy.

"Proprietary medicines," he said, "in the past have been sold through non-drug outlets. They are now. There are not enough drug stores and druggists, and their numbers are not increasing in the same ratio as the population.

In his discussion of restrictive sales policies in those states where pharmacy boards are endeavoring to confine home remedies to drugstore sales, Mr. Hoge said, "It is unfortunate for pharmacy when its boards become constabularies for patroling competitive highways of distribution."

"It is unfortunate for all of us," he added, "for industry and for government and especially for the public, when goods as important as medicines become hostages to economic strife."

In closing Mr. Hoge tied in the future service of pharmacy and the industry with the resolution of the problem. He added that the Proprietary Association has prepared a written statement of support for the Harris bill, now before a congressional committee.

Pesticides Aplenty

—Continued from page 4

the whole as on the same date a year earlier, according to the annual survey of manufacturers' inventories conducted by the department in cooperation with the National Agricultural Chemicals Association.

A somewhat larger proportion on the technical basis (38.6 percent compared to 27.9 percent in 1956) was reported to be prepared mixtures or formulations.

Returns from basic producers reporting in both 1956 and 1957 indicated stocks of technical goods in their possession to have been up 28 percent in 1957. Their inventories as of September 30, 1958, totaled 97,483,000 pounds; as of September 30, 1957, they were 124,851,000 pounds.

Sulfur Firms Form Unit

—Continued from page 3

tight following the Korean War and, as a result, it was felt then that there was little need for a sulfur export organization.

The new export marketing company will have a four-man board of directors. Besides Mr. Black and Mr. Hill, C. O. Stephens and C. A. Wight will also serve. Mr. Stephens is president of Texas Gulf Sulphur, while Mr. Wight is chairman of Freeport's executive committee.

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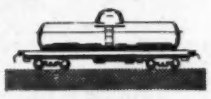

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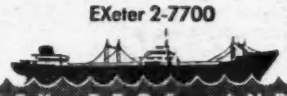

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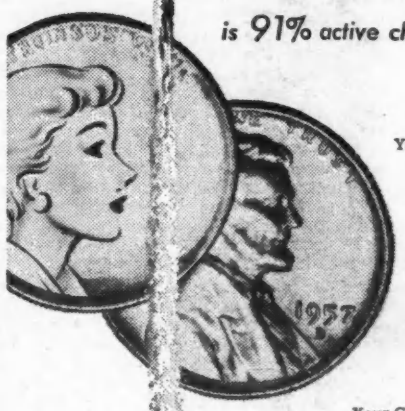

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